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CRPL-F 238 PART A

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PART A
IONOSPHERIC DATA

ISSUED
JUNE 1964

U. S. DEPARTMENT OF COMMERCE
NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

CRPL-F 238
PART A

NATIONAL BUREAU OF STANDARDS
CENTRAL RADIO PROPAGATION LABORATORY
BOULDER, COLORADO

Issued
23 June 1964

IONOSPHERIC DATA

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IONOSPHERIC DATA

The CRPL-F series bulletins are issued as part of the responsibility of the Central Radio Propagation Laboratory for the exchange and distribution of ionospheric and related geophysical data. Part A, "Ionospheric Data," and Part B, "Solar-Geophysical Data," of the CRPL-F series present a variety of data in convenient form for use in research in radio propagation and the ionosphere and in other geophysical problems.

The current form of the tables of ionospheric data provides the monthly medians and, in addition, the number of values entering into the median determination (count) for all ionospheric characteristics listed. Also, when available, the upper and lower quartile values indicated by UQ and LQ in the tables, are listed for f_oF_2 , $h'F_2$, $h'F$, and $M(3000)F_2$. Quartile values are not listed for the other characteristics because of space limitations. The tables are prepared by IBM machine methods.

Beginning with CRPL-F221, Part A, "Ionospheric Data," the hourly median values for the graphs of critical frequencies and $M(3000)F_2$ were plotted by machine methods instead of manually, as in earlier issues. Graphs of critical frequencies and $M(3000)F_2$ will continue to appear. Graphs of percentage of time of occurrence for fEs and virtual heights of the regular ionospheric layers are no longer included. Data on percentage of time of occurrence of fEs above 3, 5, and 7 Mc are available from the CRPL and the IGY World Data Center for Airglow and Ionosphere.

For many years, the tables of ionospheric data appearing in the F series, Part A, listed values of medians recomputed at CRPL. While this practice enforced a certain uniformity, it was subject to some valid criticism for tampering with the original data. The tables and graphs now show the ionospheric data as they are provided by the originating laboratory. Responsibility for the accuracy and reliability of the data rests entirely with the originator.

Medians of data for the U.S. stations are computed in accordance with the recommendations of the World-Wide Soundings Committee. Data will appear in the F series, Part A, only when the complete daily-hourly tabulations have been received by the CRPL or the IGY World Data Center A for Airglow and Ionosphere.

Information on symbols, terminology, and conventions may be found in the "URSI Handbook of Ionogram Interpretation and Reduction, of the World-Wide Soundings Committee," edited by W. R. Piggott and K. Rawer (Elsevir, 1961), which supersedes previous documents. A list of symbols is available from CRPL on request.

The following table contains the latest available information on smoothed observed Zurich sunspot numbers, beginning with the minimum of April 1954. Final numbers are listed through June 1963, the succeeding values being based on provisional data.

Smoothed Observed Zurich Sunspot Number

Month	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1954				3	4	4	5	7	8	8	10	12
1955	14	16	19	23	29	35	40	46	55	64	73	81
1956	89	98	109	119	127	137	146	150	151	156	160	164
1957	170	172	174	181	186	188	191	194	197	200	201	200
1958	199	201	201	197	191	187	185	185	184	182	181	180
1959	179	177	174	169	165	161	156	151	146	141	137	132
1960	129	125	122	120	117	114	109	102	98	93	88	84
1961	80	75	69	64	60	56	53	52	52	51	50	49
1962	45	42	40	39	39	38	37	35	33	31	30	30
1963	29	30	30	29	29	28	28	27	27	26	23	
1964												

Units of Ionospheric Data Tables

foF2, foEs - - - Tenths of a megacycle
 foF1, foE - - - Hundredths of a megacycle
 h'F2, h'F, h'E - Kilometers
 M(3000)F2 - - - Hundredths

NOTE: Occasionally, when the median falls between two of the observed values, the median is carried an extra decimal place beyond these units. Those cases are easily identifiable by the extra digit appearing to the right of the number, in a column usually left blank.

MED - Median
 CNT - Count
 UQ - Upper Quartile
 LQ - Lower Quartile

WORLD - WIDE SOURCES OF IONOSPHERIC DATA

THE IONOSPHERIC DATA GIVEN IN TABLES 1 TO 100 AND FIGURES 1 TO 100 WERE ASSEMBLED BY THE CENTRAL RADIO PROPAGATION LABORATORY FOR ANALYSIS, CORRELATION AND DISTRIBUTION. THE FOLLOWING ARE THE SOURCES OF THE DATA IN THIS ISSUE:

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COCOS IS.

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ADAK, ALASKA
FT. MONMOUTH, NEW JERSEY

NATIONAL BUREAU OF STANDARDS, UNITED STATES OF AMERICA
(CENTRAL RADIO PROPAGATION LABORATORY)
ANCHORAGE, ALASKA
BARROW, ALASKA
MAUI, HAWAII

TABLES OF IONOSPHERIC DATA

September 1963 - February 1959

TABLE 3

3

CODRAN, COHEN AND

TIME 45.01V

LASKA

TABLE 2

151.9N, 176.6W)

TIME 180.0W

hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f2F	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6F1	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135
f6E	MED CNT LQ	U 32 35 33	U 24 35 33	U 18 10 41	U 15 36 36	U 15 38 41	U 31 8 36	U 37 12 40	U 41 35 44	U 37 14 48	U 48 16 50	U 50 36 53	U 50 55 52	U 55 58 52	U 58 65 64	U 65 70 78	U 75 82 88	U 82 90 95	U 90 98 100	U 98 105 110	U 105 112 118	U 112 120 125	U 120 128 135	U 120 128 135

CWEEK 1 4 MC TO 0 0 MC IN 6 SECONDS -

SEPTEMBER, 1963

When a "less than" sign occurs on the graph of the E layer or foEs and a qualifying E is not found in the table, the corresponding descriptive E (which at times means "less than") was not printed in the table.

TABLE 3

W

MAUI • HAWAII

TIME 150.0W

[illegible]

CASED 0 25 M°C TO 20 C M°C IN 27 SECONDS

AUGUST, 1963

TABLE 4

BARROW, ALASKA

(71.3N, 156.8W)

TIME 150.0W

[illegible]

SWEEP 1.0 MC TO 25.0 MC IN 27 SECONDS.

JUNE, 1963

TABLE 5
151.9N, 179.0W

AUSK, ALASKA

151.9N, 179.0W

151.9N, 179.0W

151.9N, 179.0W

151.9N, 179.0W

151.9N, 179.0W

151.9N, 179.0W

151.9N, 179.0W

151.9N, 179.0W

151.9N, 179.0W

151.9N, 179.0W

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
fF2	MED	42	37	36	33	35	42	46	50	52	50	52	50	49	47	48	48	49	53	58	62	55	48		
	CNT	24	23	22	25	29	30	28	27	27	26	28	28	29	29	28	28	27	27	30	26	25	22		
	LO	50	45	42	38	40	38	42	46	47	47	47	50	47	47	47	47	47	47	50	45	40	35		
	UQ	38	34	31	27	34	39	43	44	44	44	44	44	47	44	44	44	44	44	47	42	37	32		
	hF2	40	36	33	29	36	41	45	46	46	46	46	46	49	46	46	46	46	46	49	44	39	34		
h'F2	MED	40	36	33	29	36	40	36	32	37	36	38	36	35	34	36	35	34	35	39	43	38	33		
	CNT	22	20	19	22	26	25	24	23	24	23	24	23	22	21	23	22	23	24	28	32	26	21		
	LO	46	43	42	40	43	44	43	44	44	44	45	44	45	44	45	46	46	46	49	44	39	34		
	UQ	380	378	366	348	330	313	323	334	360	391	426	380	391	426	380	391	426	380	391	426	380	391		
	h'F2	40	36	33	29	36	40	36	32	37	36	38	36	35	34	36	35	34	35	39	43	38	33		
h'F	MED	26.0	27.0	27.5	28.8	26.2	24.4	23.2	23.8	22.5	20.1	20.1	20.0	19.8	20.1	21.6	22.3	20.0	25.4	24.9	25.5	25.0	23.6	24.5	
	CNT	2.2	2.8	2.9	3.0	2.6	2.5	2.4	2.2	2.4	2.4	2.1	2.0	2.1	2.4	2.5	2.5	2.6	2.7	2.3	2.6	2.2	2.7		
	LO	7.8	7.5	7.6	7.8	7.6	7.3	7.2	7.1	7.0	6.9	6.8	6.7	6.6	6.7	7.0	7.2	6.9	7.4	7.3	7.6	7.2	7.0		
	UQ	31.0	30.0	29.5	29.0	28.0	27.5	27.8	25.0	23.0	25.4	29.2	30.0	28.0	27.0	27.8	29.5	28.8	30.0	31.0	31.5	32.0	31.5	31.5	
	h'F	31.0	30.0	29.5	29.0	28.0	27.5	27.8	25.0	23.0	25.4	29.2	30.0	28.0	27.0	27.8	29.5	28.8	30.0	31.0	31.5	32.0	31.5	31.5	
ME5000F2	MED	18	14	19	21	18	28	30	26	26	26	26	26	26	27	27	28	27	27	30	24	26	20		
	CNT	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		
	LO	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		
	UQ	25.4	26.5	27.0	27.5	28.0	27.6	27.0	27.5	28.0	27.6	27.5	28.0	27.6	27.5	28.0	27.6	27.5	28.0	27.6	27.5	28.0	27.6		
	h'F	25.4	26.5	27.0	27.5	28.0	27.6	27.0	27.5	28.0	27.6	27.5	28.0	27.6	27.5	28.0	27.6	27.5	28.0	27.6	27.5	28.0	27.6		
fF1	MED	270	320	350	360	380	400	410	420	435	430	430	420	410	400	390	390	390	390	400	390	368	308		
	CNT	212	22	23	21	15	19	23	26	28	29	27	27	28	29	27	27	28	27	27	28	25	23		
	LO	792	745	770	792	800	810	815	815	815	815	815	815	815	815	815	815	815	815	815	815	815	815		
	UQ	4	8	16	22	20	20	21	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23		
	h'F	792	745	770	792	800	810	815	815	815	815	815	815	815	815	815	815	815	815	815	815	815	815		
fF6	MED	113	105	102	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
	CNT	4	29	30	30	28	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30		
	LO	113	105	102	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
	UQ	4	29	30	30	28	29	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30		
	h'F	113	105	102	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100		
fF6a	MED	38	36	32	38	19	26	34	37	44	46	48	43	39	37	36	35	38	40	37	44	37	37	42	
	CNT	15	16	11	12	30	26	30	32	29	29	34	29	29	29	30	30	30	30	30	29	27	29	25	
	LO	38	36	32	38	19	26	34	37	44	46	48	43	39	37	36	35	38	40	37	44	37	37	42	
	UQ	15	16	11	12	30	26	30	32	29	29	34	29	29	29	30	30	30	30	30	29	27	29	25	
	h'F	38	36	32	38	19	26	34	37	44	46	48	43	39	37	36	35	38	40	37	44	37	37	42	

TABLE 9

FROMSEN, NORWAY 169.7N, 19.0E) TIME 15.06

[illegible]

SWEEP 0.7 MC TO 25.0 MC IN 4 MINUTES, AUTOMATIC.

MAY. 1963

TABLE 10

ANCHORAGE, ALASKA
(6) 2N, 160.0W
TIME 150.0W

	hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f#2	MED	15	14	17	11	36	44	42	66	47	47	64	68	56	56	56	57	57	67	68	66	67	66	77	77
	CNT	15	14	17	11	36	44	42	66	47	47	64	68	56	56	56	57	57	67	68	66	67	66	77	77
	LO	24	24	25	25	34	34	34	42	41	42	41	42	41	41	42	41	42	41	42	41	42	41	42	41
f#2	MED	24	24	25	25	34	34	34	42	41	42	41	42	41	41	42	41	42	41	42	41	42	41	42	41
	CNT	24	24	25	25	34	34	34	42	41	42	41	42	41	41	42	41	42	41	42	41	42	41	42	41
	LO	24	24	25	25	34	34	34	42	41	42	41	42	41	41	42	41	42	41	42	41	42	41	42	41
f#F	MED	15	14	17	11	36	44	42	66	47	47	64	68	56	56	56	57	57	67	68	66	67	66	77	77
	CNT	15	14	17	11	36	44	42	66	47	47	64	68	56	56	56	57	57	67	68	66	67	66	77	77
	LO	24	24	25	25	34	34	34	42	41	42	41	42	41	41	42	41	42	41	42	41	42	41	42	41
f#F1	MED	15	14	17	11	36	44	42	66	47	47	64	68	56	56	56	57	57	67	68	66	67	66	77	77
	CNT	15	14	17	11	36	44	42	66	47	47	64	68	56	56	56	57	57	67	68	66	67	66	77	77
	LO	24	24	25	25	34	34	34	42	41	42	41	42	41	41	42	41	42	41	42	41	42	41	42	41
f#E	MED	15	14	17	11	36	44	42	66	47	47	64	68	56	56	56	57	57	67	68	66	67	66	77	77
	CNT	15	14	17	11	36	44	42	66	47	47	64	68	56	56	56	57	57	67	68	66	67	66	77	77
	LO	24	24	25	25	34	34	34	42	41	42	41	42	41	41	42	41	42	41	42	41	42	41	42	41
f#Ea	MED	15	14	17	11	36	44	42	66	47	47	64	68	56	56	56	57	57	67	68	66	67	66	77	77
	CNT	15	14	17	11	36	44	42	66	47	47	64	68	56	56	56	57	57	67	68	66	67	66	77	77
	LO	24	24	25	25	34	34	34	42	41	42	41	42	41	41	42	41	42	41	42	41	42	41	42	41

SWEEP 1.0 MC TO 25.0 MC IN 13.5 SECONDS.

MAY • 1963

Y. G.

[illegible]

SWEEP 1.0 MC TO 25.0 MC IN 1 MINUTE.

MAY 1963

100

[illegible]

MC 13-0 MC 1N 50

200

AMSTERDAM, INDIA 171.4N, 72.4E

TIME 15:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
M13000IF2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F1	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16E	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16E	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16Ea	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ

SWEET 0.4 MC TO 25.0 MC IN 5 MINUTES, AUTOMATIC.

APRIL, 1963

ROME, ITALY 41.40N, 12.4E

TIME 15:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
M13000IF2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F1	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16E	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16E	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16Ea	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ

SWEET 1.4 MC TO 15.0 MC IN 5 MINUTES, AUTOMATIC.

APRIL, 1963

RESOLUTE BAY, CANADA 57.4N, 152.4W

TIME 15:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
M13000IF2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F1	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16E	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16E	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16Ea	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ

SWEET 1.0 MC TO 16.0 MC IN 16 SECONDS.

MARCH, 1963

FL CEBILLO, MEXICO 19.4N, 99.4W

TIME 15:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
M13000IF2	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16F1	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16E	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16E	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ
16Ea	MED	CNT	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ	UQ

SWEET 1.0 MC TO 25.0 MC IN 16 SECONDS.

APRIL, 1963

Y. A. Izrael, *USSR*

CHESDILL, ANNIE											11-1-21, 1921-21											TYPE			
HOUR		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT LO	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4
f6F2	MED CNT LO	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4
f6F	MED CNT LO	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4
M3000F2	MED CNT LO	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4
f6F1	MED CNT	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4
f6E	MED CNT	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4
f6E	MED CNT	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4
f6E4	MED CNT	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4

SWEEP 1.0 MC TO 16.0 MC IN 16 SECONDS.

* observations recorded 11 through 31 only, equipment failure.

MARCH, 1963

10

[illegible]

SWEEP 1.6 MC TO 16.0 MC IN 20 SECONDS.

MARCH, 1963

21. 0772

[illegible]

SWEEP 1.0 MC TO 16.0 MC IN 20 SECONDS.

MAG. 11.

YAGQ - 4

[illegible]

1947. 1948.

CHURCHILL, CANADA
TABLE 26
(5°-40'N, 94°-20'W)

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f _o F2	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
h'F	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
M3000F2	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
f _o F1																								
f _o E																								
h'E																								
f _o E _s																								

SWEET 1.0 MC TO 16.0 MC IN 16 SECONDS.

FEBRUARY, 1963

TABLE 29
(5°-40'N, 44°-20'W)

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f _o F2	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
h'F	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
M3000F2	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
f _o F1																								
f _o E																								
h'E																								
f _o E _s																								

SWEET 1.0 MC TO 25.0 MC IN 5 MINUTES, AUTOMATIC.

FEBRUARY, 1963

TABLE 27
(5°-40'N, 94°-20'W)

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f _o F2	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
h'F	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
M3000F2	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
f _o F1																								
f _o E																								
h'E																								
f _o E _s																								

SWEET 1.0 MC TO 16.0 MC IN 20 SECONDS.

FEBRUARY, 1963

TABLE 28
(5°-40'N, 44°-20'W)

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f _o F2	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
h'F	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
M3000F2	24	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
f _o F1																								
f _o E																								
h'E																								
f _o E _s																								

SWEET 1.0 MC TO 16.0 MC IN 15 SECONDS.

FEBRUARY, 1963

STEFAN, SWITZERLAND

TIME 13:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UO LO	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5
N F2	MED CNT UO LO																							
N F	MED CNT UO LO																							
M13000IF2	MED CNT UO LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
N E	MED CNT																							
f6Ea	MED CNT																							

SWEEP 1.0 MC TO 16.0 MC IN 10 SECONDS.

FEBRUARY, 1963

TABLE 31

STEFAN, SWITZERLAND

TIME 13:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UO LO	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5
N F2	MED CNT UO LO																							
N F	MED CNT UO LO																							
M13000IF2	MED CNT UO LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
N E	MED CNT																							
f6Ea	MED CNT																							

SWEEP 1.0 MC TO 16.0 MC IN 10 SECONDS.

FEBRUARY, 1963

TABLE 32

STEFAN, SWITZERLAND

TIME 13:00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UO LO	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5	3.5 2.5 2.5 2.5
N F2	MED CNT UO LO																							
N F	MED CNT UO LO																							
M13000IF2	MED CNT UO LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
N E	MED CNT																							
f6Ea	MED CNT																							

SWEEP 1.0 MC TO 16.0 MC IN 10 SECONDS.

FEBRUARY, 1963

SWEEP 1.0 MC TO 16.0 MC IN 10 SECONDS.

FEBRUARY, 1963

SWEEP 1.0 MC TO 16.0 MC IN 10 SECONDS.

FEBRUARY, 1963

ON 1011211 - 130416 JAN
(38.7N, 130.4E)
70015 33

	hour	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6 F2	MED CNT Ug Lg	3.2 2.7 3.3 3.1	3.3 2.8 3.4 3.1	3.3 2.9 3.4 3.1	3.4 3.0 3.4 3.1	3.2 2.8 3.2 2.9	3.2 2.8 3.2 2.9	3.3 2.9 3.3 3.0	3.3 2.9 3.3 3.0	3.5 3.0 3.4 3.1	3.5 3.0 3.4 3.1	3.4 2.9 3.3 3.0	3.4 2.9 3.3 3.0	3.5 3.0 3.4 3.1	3.6 3.1 3.5 3.2	3.7 3.2 3.6 3.3	3.8 3.3 3.7 3.4	3.9 3.4 3.8 3.5	4.0 3.5 3.9 3.6	4.1 3.6 4.0 3.7	4.2 3.7 4.1 3.8	4.3 3.8 4.2 3.9	4.4 3.9 4.3 4.0	4.5 4.0 4.4 4.1	4.6 4.1 4.5 4.2
n F2	MED CNT Ug Lg																								
n F	MED CNT Ug Lg	3.00 2.6 2.6	2.99 2.6 2.6	2.97 2.6 2.6	2.95 2.6 2.6	2.94 2.6 2.6	2.93 2.6 2.6	2.92 2.6 2.6	2.91 2.6 2.6	2.90 2.6 2.6	2.89 2.6 2.6	2.88 2.6 2.6	2.87 2.6 2.6	2.86 2.6 2.6	2.85 2.6 2.6	2.84 2.6 2.6	2.83 2.6 2.6	2.82 2.6 2.6	2.81 2.6 2.6	2.80 2.6 2.6	2.79 2.6 2.6	2.78 2.6 2.6	2.77 2.6 2.6	2.76 2.6 2.6	2.75 2.6 2.6
M30001 F2	MED CNT Ug Lg	2.95 2.3 2.3	2.90 2.2 2.2	2.85 2.1 2.1	2.80 2.0 2.0	2.75 1.9 1.9	2.70 1.8 1.8	2.65 1.7 1.7	2.60 1.6 1.6	2.55 1.5 1.5	2.50 1.4 1.4	2.45 1.3 1.3	2.40 1.2 1.2	2.35 1.1 1.1	2.30 1.0 1.0	2.25 0.9 0.9	2.20 0.8 0.8	2.15 0.7 0.7	2.10 0.6 0.6	2.05 0.5 0.5	2.00 0.4 0.4	1.95 0.3 0.3	1.90 0.2 0.2	1.85 0.1 0.1	1.80 0.0 0.0
f6 F1	MED CNT																								
f6 E	MED CNT																								
n E	MED CNT																								
f6 E4	MED CNT	3.1 2.6 2.6	2.9 2.4 2.4	2.8 2.3 2.3	2.7 2.2 2.2	2.6 2.1 2.1	2.5 2.0 2.0	2.4 1.9 1.9	2.3 1.8 1.8	2.2 1.7 1.7	2.1 1.6 1.6	2.0 1.5 1.5	1.9 1.4 1.4	1.8 1.3 1.3	1.7 1.2 1.2	1.6 1.1 1.1	1.5 1.0 1.0	1.4 0.9 0.9	1.3 0.8 0.8	1.2 0.7 0.7	1.1 0.6 0.6	1.0 0.5 0.5	0.9 0.4 0.4	0.8 0.3 0.3	0.7 0.2 0.2

TABLE 35
AHMEDABAD, INDIA
(23.0N, 72.6E)

[illegible]

YAMAGAWA, JAPAN
(31.74, 130.65)
* 30 ' 1 *

[illegible]

GOAIKANAL, INDIA 110.2N, 77.5E

[illegible]

TABLE 39
MINNEAPOLIS, UNION OF S. AFRICA 120x15x 28x101

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED																							
CNT																								
UQ																								
LQ																								
16F2	MED																							
CNT																								
UQ																								
LQ																								
16F	MED																							
CNT																								
UQ																								
LQ																								
M13000IF2	MED																							
CNT																								
UQ																								
LQ																								
16F1	MED																							
CNT																								
UQ																								
LQ																								
16E	MED																							
CNT																								
UQ																								
LQ																								
16Ea	MED																							
CNT																								
UQ																								
LQ																								

TABLE 39
MINNEAPOLIS, UNION OF S. AFRICA 120x15x 28x101
15.0 MC IN 1 MIN. IN 5 MINUTES, AUTOMATIC.

JANUARY, 1963

TABLE 40
PORT STANLEY, ISLAND OF S. AFRICA 120x15x 28x101

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED																							
CNT																								
UQ																								
LQ																								
16F2	MED																							
CNT																								
UQ																								
LQ																								
16F	MED																							
CNT																								
UQ																								
LQ																								
M13000IF2	MED																							
CNT																								
UQ																								
LQ																								
16F1	MED																							
CNT																								
UQ																								
LQ																								
16E	MED																							
CNT																								
UQ																								
LQ																								
16Ea	MED																							
CNT																								
UQ																								
LQ																								

TABLE 40
PORT STANLEY, ISLAND OF S. AFRICA 120x15x 28x101
15.0 MC IN 1 MIN. IN 5 MINUTES, AUTOMATIC.

JANUARY, 1963

TABLE 39
MINNEAPOLIS, UNION OF S. AFRICA 120x15x 28x101

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED																							
CNT																								
UQ																								
LQ																								
16F2	MED																							
CNT																								
UQ																								
LQ																								
16F	MED																							
CNT																								
UQ																								
LQ																								
M13000IF2	MED																							
CNT																								
UQ																								
LQ																								
16F1	MED																							
CNT																								
UQ																								
LQ																								
16E	MED																							
CNT																								
UQ																								
LQ																								
16Ea	MED																							
CNT																								
UQ																								
LQ																								

TABLE 39
MINNEAPOLIS, UNION OF S. AFRICA 120x15x 28x101
15.0 MC IN 1 MIN. IN 5 MINUTES, AUTOMATIC.

JANUARY, 1963

[illegible]

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

[illegible]

SWEEP 1.0 MC TO 20.0 MC IN 1 MINUTES, AUTOMATIC.

[illegible][illegible]

TABLE 46

GENOVA ON RFA (ARFELINO) ITALY
151.75, 54.00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LQ																							
f6F1	MED CNT UQ LQ																							
f6F	MED CNT UQ LQ																							
MIS000IF2	MED CNT UQ LQ																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Es	MED CNT																							

TIME 15.00

SEPTEMBER, 1962

TABLE 47

POST STANLEY (FALKLAND IS.)
151.75, 54.00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LQ																							
f6F1	MED CNT UQ LQ																							
f6F	MED CNT UQ LQ																							
MIS000IF2	MED CNT UQ LQ																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Es	MED CNT																							

TIME 15.00

OCTOBER, 1962

TABLE 48

POST STANLEY (FALKLAND IS.)
151.75, 54.00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LQ																							
f6F1	MED CNT UQ LQ																							
f6F	MED CNT UQ LQ																							
MIS000IF2	MED CNT UQ LQ																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Es	MED CNT																							

TIME 15.00

SEPTEMBER, 1962

TABLE 49

POST STANLEY (FALKLAND IS.)
151.75, 54.00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LQ																							
f6F1	MED CNT UQ LQ																							
f6F	MED CNT UQ LQ																							
MIS000IF2	MED CNT UQ LQ																							
f6F1	MED CNT																							
f6E	MED CNT																							
f6E	MED CNT																							
f6Es	MED CNT																							

TIME 15.00

SEPTEMBER, 1962

TABLE 49

GENOVA (MONTE CAPPILLINO) ITALY 1966-68 9.061

[illegible]

AUGUST, 1962

SWEPT 1.0 MC TO 20.0 MC IN 3 MINUTES, AUTOMATIC.

TABLE 1

[illegible]

TABLE 50

112.25, 96.961

[illegible]

AUGUST, 1962

SWEEP 1.6 MC TO 20.0 MC IN 15 SECONDS.

— 224 —

[illegible]

ENLORD, ELENA

GENOVA, ITALY

TIME 15,00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
to F2	MED CNT UQ LO																							
to F2	MED CNT UQ LO																							
to F	MED CNT UQ LO																							
M3000/F2	MED CNT UQ LO																							
to F1	MED CNT																							
to E	MED CNT																							
to E	MED CNT																							
to Es	MED CNT																							

SWEEP 1.0 MC TO 10.0 MC IN 3 MINUTES, AUTOMATIC.

JULY, 1962

GENOVA, ITALY

GENOVA, ITALY

TIME 15,00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
to F2	MED CNT UQ LO																							
to F2	MED CNT UQ LO																							
to F	MED CNT UQ LO																							
M3000/F2	MED CNT UQ LO																							
to F1	MED CNT																							
to E	MED CNT																							
to E	MED CNT																							
to Es	MED CNT																							

SWEEP 1.0 MC TO 10.0 MC IN 3 MINUTES, AUTOMATIC.

JULY, 1962

GENOVA, ITALY

TIME 15,00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
to F2	MED CNT UQ LO																							
to F2	MED CNT UQ LO																							
to F	MED CNT UQ LO																							
M3000/F2	MED CNT UQ LO																							
to F1	MED CNT																							
to E	MED CNT																							
to E	MED CNT																							
to Es	MED CNT																							

SWEEP 1.0 MC TO 10.0 MC IN 3 MINUTES, AUTOMATIC.

JUNE, 1962

GENOVA, ITALY

GENOVA, ITALY

TIME 15,00

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
to F2	MED CNT UQ LO																							
to F2	MED CNT UQ LO																							
to F	MED CNT UQ LO																							
M3000/F2	MED CNT UQ LO																							
to F1	MED CNT																							
to E	MED CNT																							
to E	MED CNT																							
to Es	MED CNT																							

SWEEP 1.0 MC TO 10.0 MC IN 3 MINUTES, AUTOMATIC.

MAY, 1962

TABLE 64
EL CERILLO, MEXICO
(19.3N, 90.4W)

DATE: JAN 1, 1962
TIME: 12.23

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M130001F2	MED CNT UQ LQ																							
16F1	MED CNT																							
16E	MED CNT																							
16E	MED CNT																							
16Ea	MED CNT																							

JANUARY, 1962

TABLE 64

TABLE 64
EL CERILLO, MEXICO
(19.3N, 90.4W)

DATE: JAN 1, 1962
TIME: 12.23

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M130001F2	MED CNT UQ LQ																							
16F1	MED CNT																							
16E	MED CNT																							
16E	MED CNT																							
16Ea	MED CNT																							

JANUARY, 1962

TABLE 63
EL CERILLO, MEXICO
(19.3N, 90.4W)

DATE: JAN 1, 1962
TIME: 12.23

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M130001F2	MED CNT UQ LQ																							
16F1	MED CNT																							
16E	MED CNT																							
16E	MED CNT																							
16Ea	MED CNT																							

JANUARY, 1962

TABLE 63

TABLE 63
EL CERILLO, MEXICO
(19.3N, 90.4W)

DATE: JAN 1, 1962
TIME: 12.23

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16F2	MED CNT UQ LQ																							
16F2	MED CNT UQ LQ																							
16F	MED CNT UQ LQ																							
M130001F2	MED CNT UQ LQ																							
16F1	MED CNT																							
16E	MED CNT																							
16E	MED CNT																							
16Ea	MED CNT																							

JANUARY, 1962

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

[illegible]

SWEEP 1.0 MC TO 25.0 MC IN 15 SECONDS.

• Y. 1981

[illegible]

hour		00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	LO	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
to F2	MED	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63
	CNT	55	56	54	54	54	54	54	54	54	58	73	84	94	104	114	114	114	106	104	56	86	81	16	63

SWEEP 1.0 MC TO 25.0 MC IN 1.0 SECONDS.

MAY, 1961

EL CERILLO, MEXICO 119° 3N, 90° 5W

[illegible]

SWIFT, J. L. 7 25.0 MC IN 18 SECONDS.

APRIL, 1961

$$CD_3H_2N_2CH_3 \xrightarrow{2, 2, 2\text{-trifluoroethanol}} CD_3H_2N_2CH_2CH_2CF_3$$
[illegible]

SWEEP 1.0 MC TO 18.0 MC,

DECEMBER, 1960 19

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LO																							
N F2	MED CNT UQ LO																							
N F	MED CNT UQ LO																							
M3000IF2	MED CNT UQ LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
N E	MED CNT																							
f6Ea	MED CNT																							

SWEEP 14.0 MC TO 18.0 MC.

NOVEMBER, 1960

Table 4
(2x15, 28x85)

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LO																							
N F2	MED CNT UQ LO																							
N F	MED CNT UQ LO																							
M3000IF2	MED CNT UQ LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
N E	MED CNT																							
f6Ea	MED CNT																							

TIME 30.00

SWEEP 14.25 MC TO 18.0 MC IN 3 MINUTES.

AUGUST, 1960

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LO																							
N F2	MED CNT UQ LO																							
N F	MED CNT UQ LO																							
M3000IF2	MED CNT UQ LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
N E	MED CNT																							
f6Ea	MED CNT																							

DECEMBER, 1960

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6F2	MED CNT UQ LO																							
N F2	MED CNT UQ LO																							
N F	MED CNT UQ LO																							
M3000IF2	MED CNT UQ LO																							
f6F1	MED CNT																							
f6E	MED CNT																							
N E	MED CNT																							
f6Ea	MED CNT																							

SWEEP 14.4 MC TO 20.0 MC IN 40 SECONDS.

OCTOBER, 1960

[illegible][illegible][illegible][illegible]

TIME	23	22	21	20	19	18	17	16	15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00	HOUR
h F2																									MED CNT UO LO
h F2																									MED CNT UO LO
h F																									MED CNT UO LO
M3000/F2																									MED CNT UO LO
h F1																									MED CNT
h E																									MED CNT
h E																									MED CNT
h E																									MED CNT

TIME	23	22	21	20	19	18	17	16	15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00	HOUR
h F2																									MED CNT UO LO
h F2																									MED CNT UO LO
h F																									MED CNT UO LO
M3000/F2																									MED CNT UO LO
h F1																									MED CNT
h E																									MED CNT
h E																									MED CNT
h E																									MED CNT

TIME	23	22	21	20	19	18	17	16	15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00	HOUR
h F2																									MED CNT UO LO
h F2																									MED CNT UO LO
h F																									MED CNT UO LO
M3000/F2																									MED CNT UO LO
h F1																									MED CNT
h E																									MED CNT
h E																									MED CNT
h E																									MED CNT

TIME	23	22	21	20	19	18	17	16	15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00	HOUR
h F2																									MED CNT UO LO
h F2																									MED CNT UO LO
h F																									MED CNT UO LO
M3000/F2																									MED CNT UO LO
h F1																									MED CNT
h E																									MED CNT
h E																									MED CNT
h E																									MED CNT

SEP 14.6 MC TO 20.0 MC IN 14 SECONDS.

DECEMBER, 1959

[illegible][illegible][illegible][illegible]

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6 F2	MED CNT UQ LO																							
f6 F2	MED CNT UQ LO																							
f6 F	MED CNT UQ LO																							
M13000F2	MED CNT UQ LO																							
f6 F1	MED CNT																							
f6 E	MED CNT																							
f6 E	MED CNT																							
f6 Ea	MED CNT																							

OCTOBER, 1962

* Observations recorded through 14 only; equipment not set.

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6 F2	MED CNT UQ LO																							
f6 F2	MED CNT UQ LO																							
f6 F	MED CNT UQ LO																							
M13000F2	MED CNT UQ LO																							
f6 F1	MED CNT																							
f6 E	MED CNT																							
f6 E	MED CNT																							
f6 Ea	MED CNT																							

OCTOBER, 1962

* Observations recorded through 14 only; equipment not set.

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6 F2	MED CNT UQ LO																							
f6 F2	MED CNT UQ LO																							
f6 F	MED CNT UQ LO																							
M13000F2	MED CNT UQ LO																							
f6 F1	MED CNT																							
f6 E	MED CNT																							
f6 E	MED CNT																							
f6 Ea	MED CNT																							

OCTOBER, 1962

* Observations recorded through 14 only; equipment not set.

HOUR	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
f6 F2	MED CNT UQ LO																							
f6 F2	MED CNT UQ LO																							
f6 F	MED CNT UQ LO																							
M13000F2	MED CNT UQ LO																							
f6 F1	MED CNT																							
f6 E	MED CNT																							
f6 E	MED CNT																							
f6 Ea	MED CNT																							

OCTOBER, 1962

* Observations recorded through 14 only; equipment not set.

[illegible]

SEPTEMBER, 1950

1.0 ME TO 17.0 ME IN 14 SECONDS.

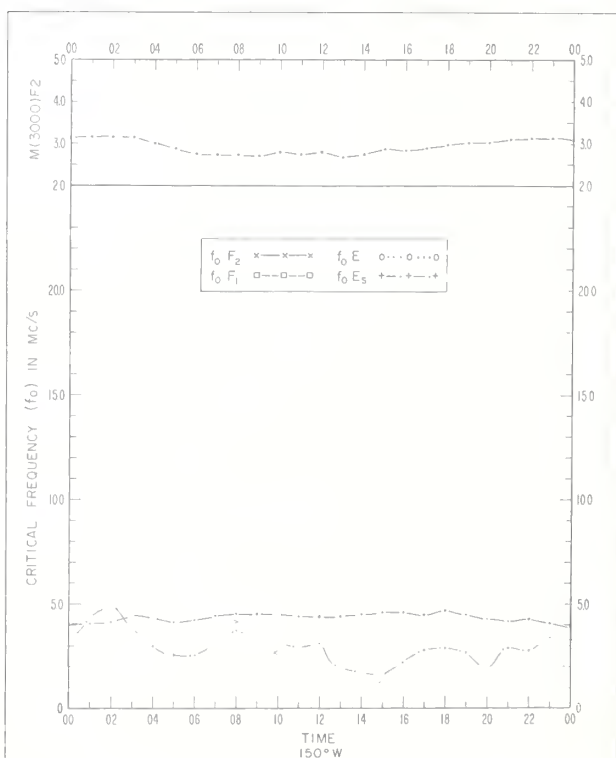
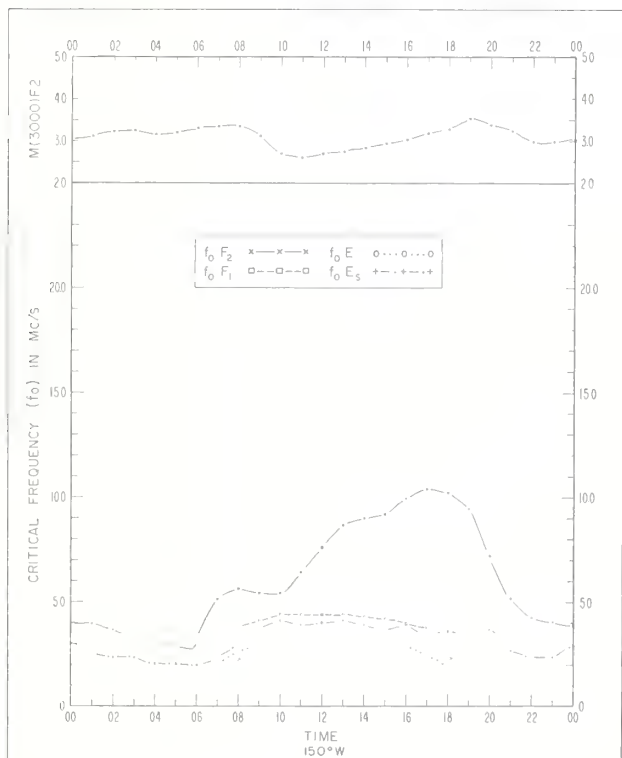
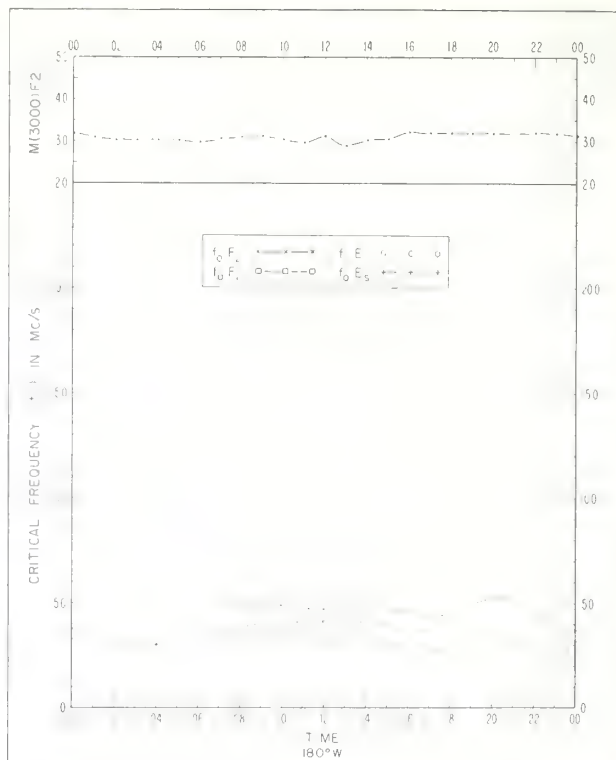
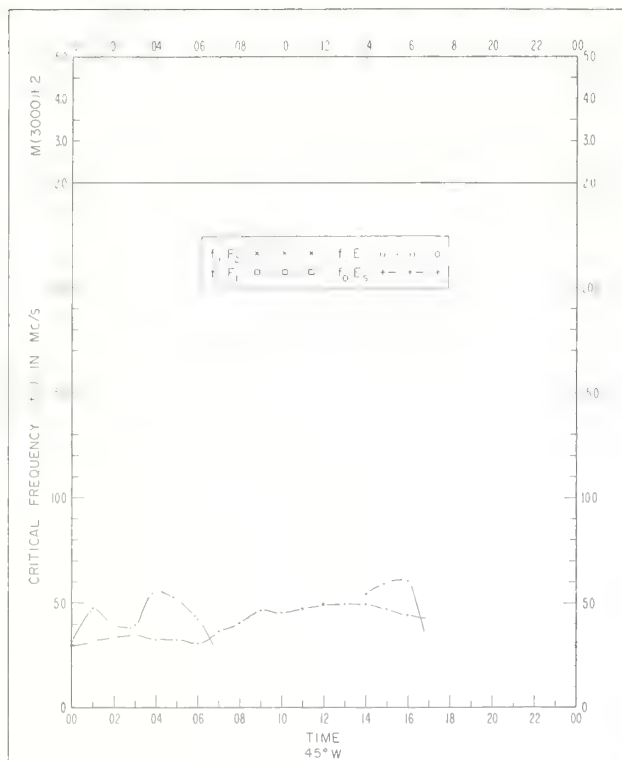
[illegible]

MAY, 1959

SWEEP 1.6 MC TO 20.0 MC IN 15 SECONDS.

[illegible][illegible][illegible]

100



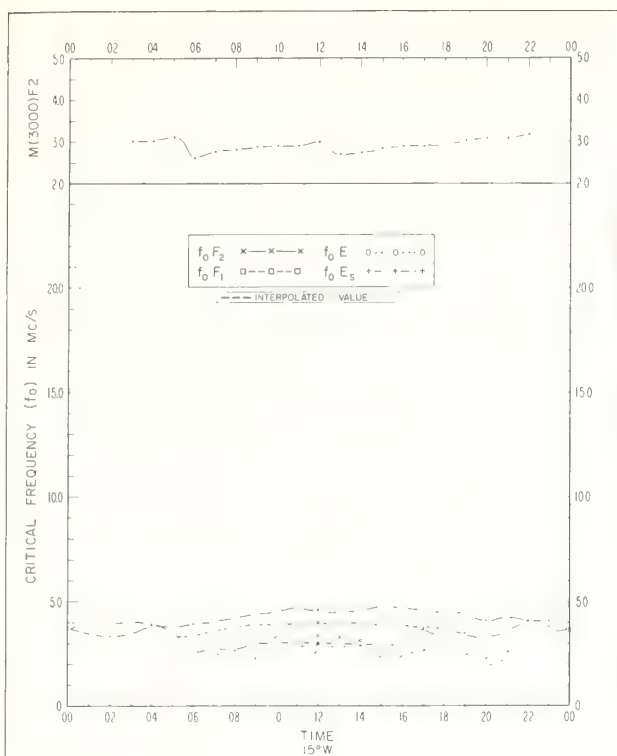


Fig 5. REYKJAVIK, ICELAND
64 1°N, 21.8°W

JUNE 1963

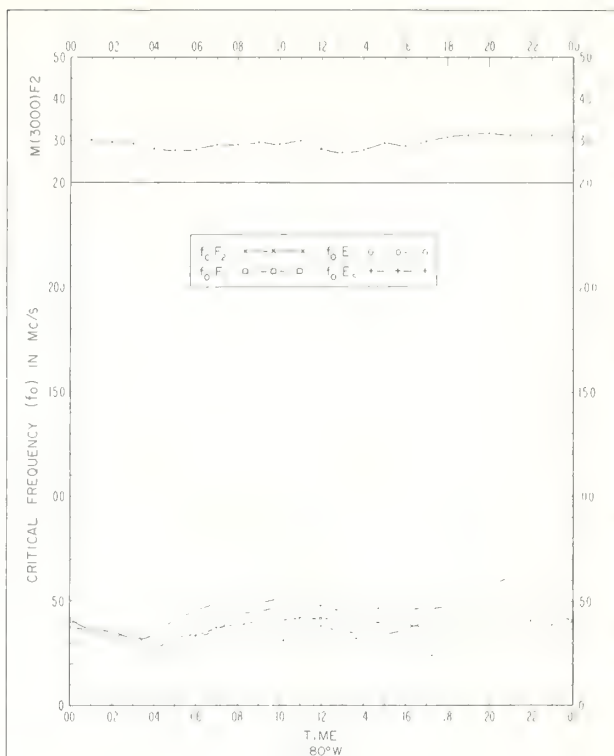


Fig. 6. ADAK, ALASKA
51 9°N, 176 6°W

JUNE 1963

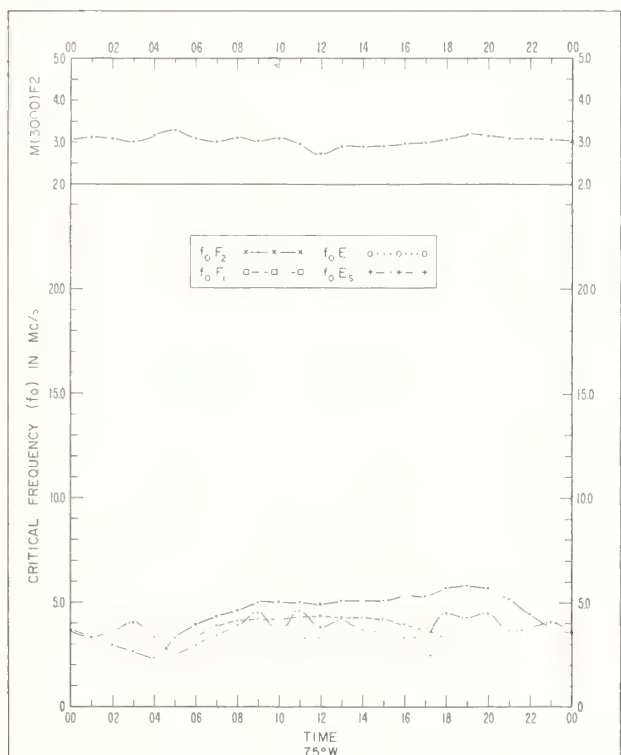


Fig. 7. FT. MONMOUTH, NEW JERSEY
40.4°N, 74.1°W

JUNE 1963

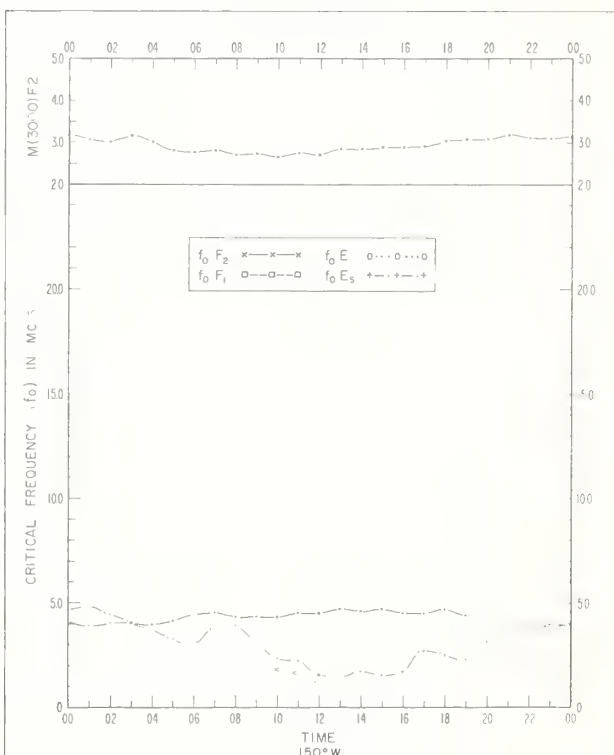
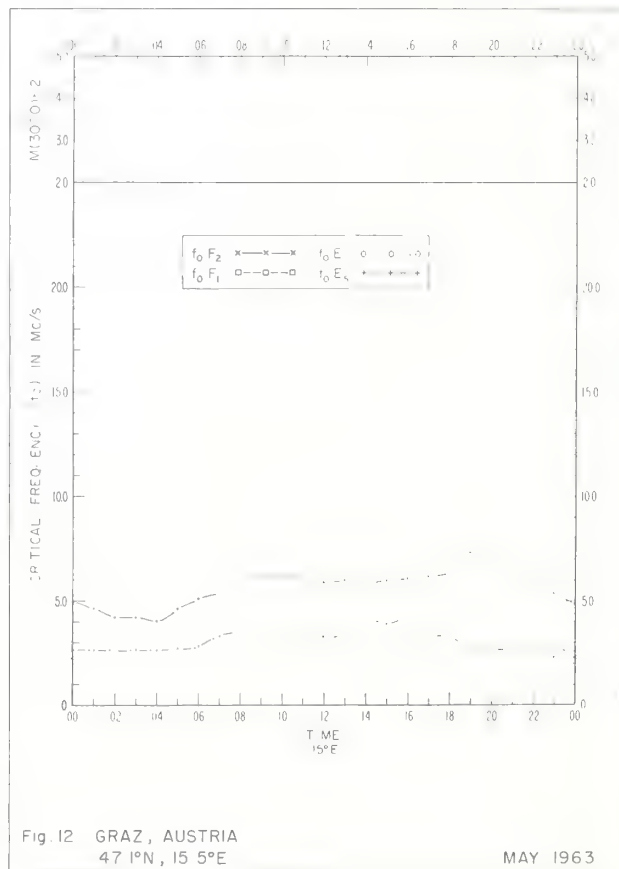
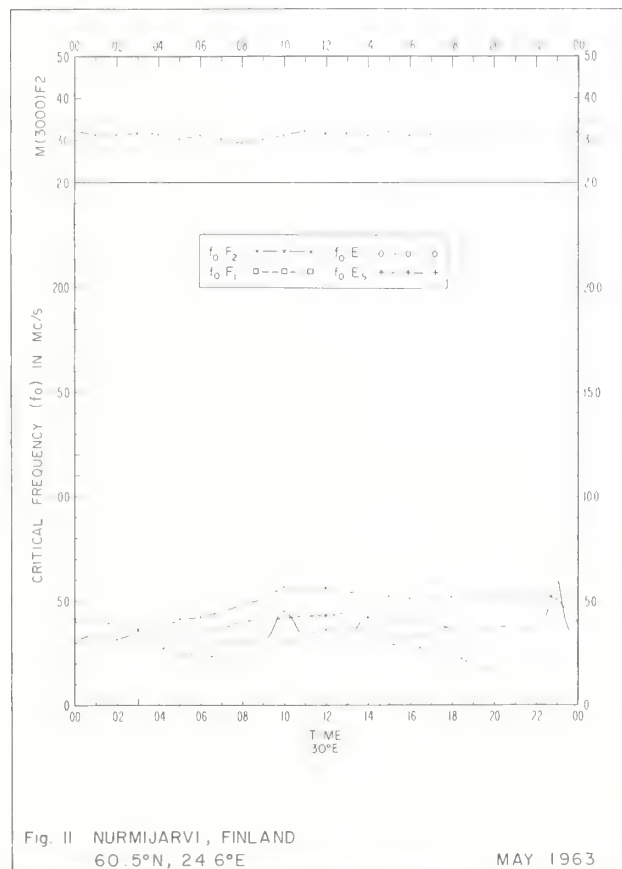
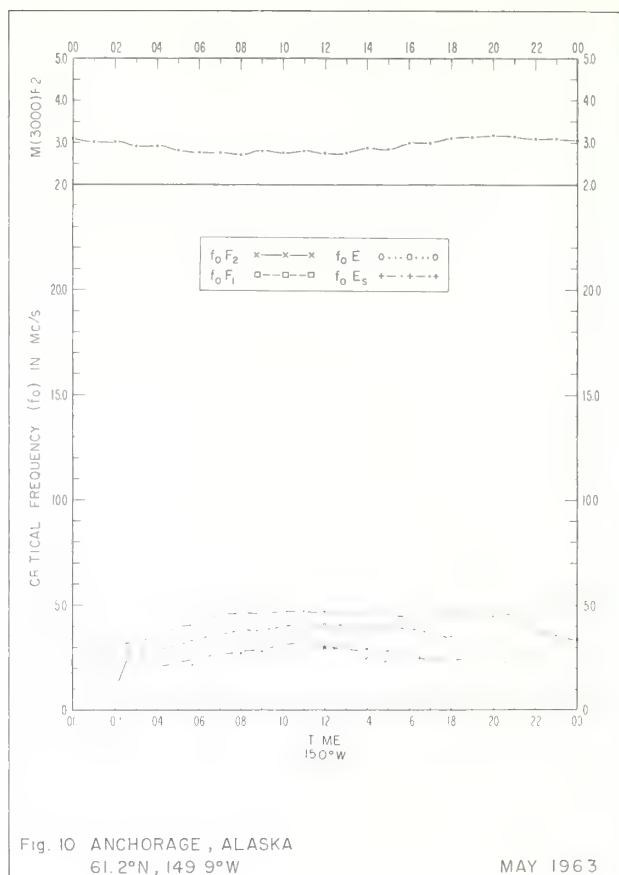
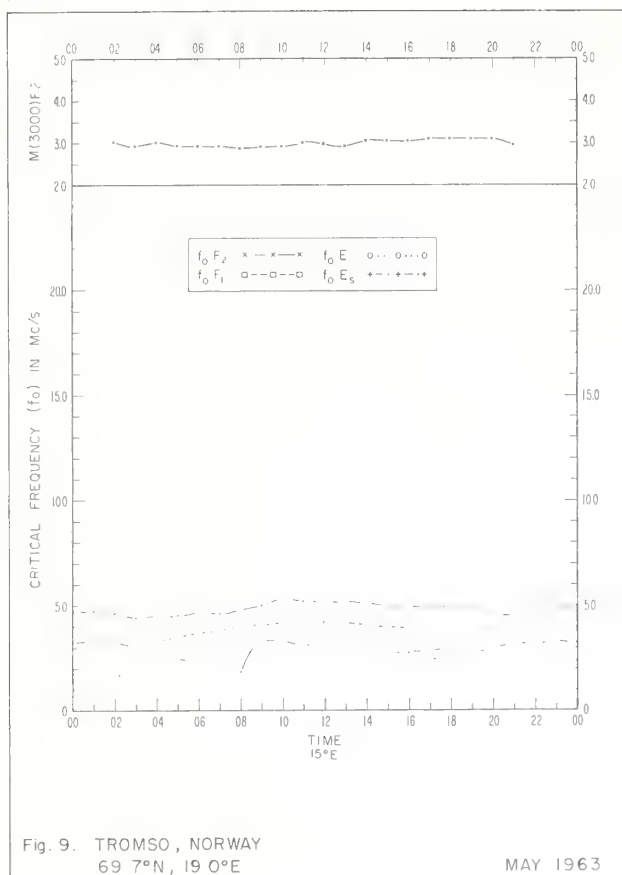
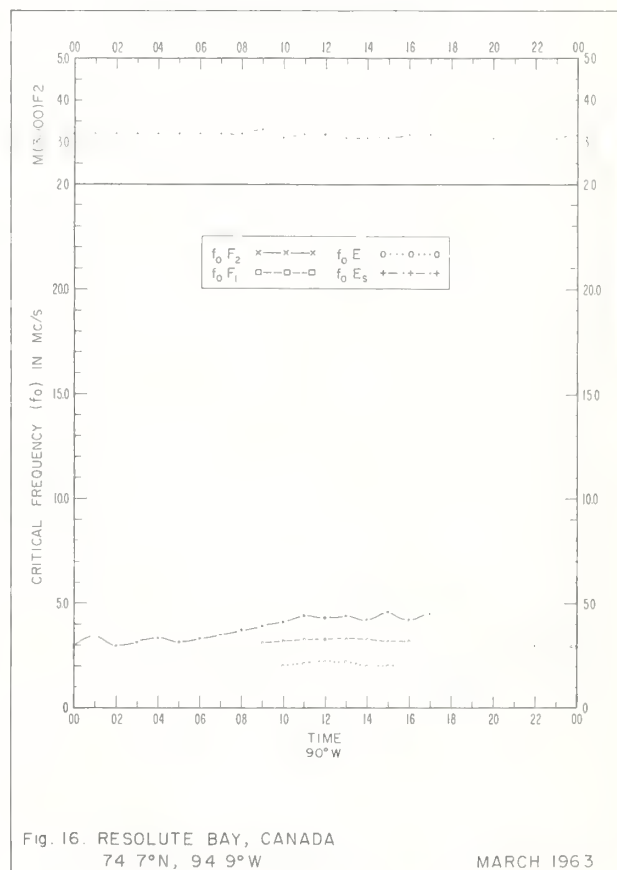
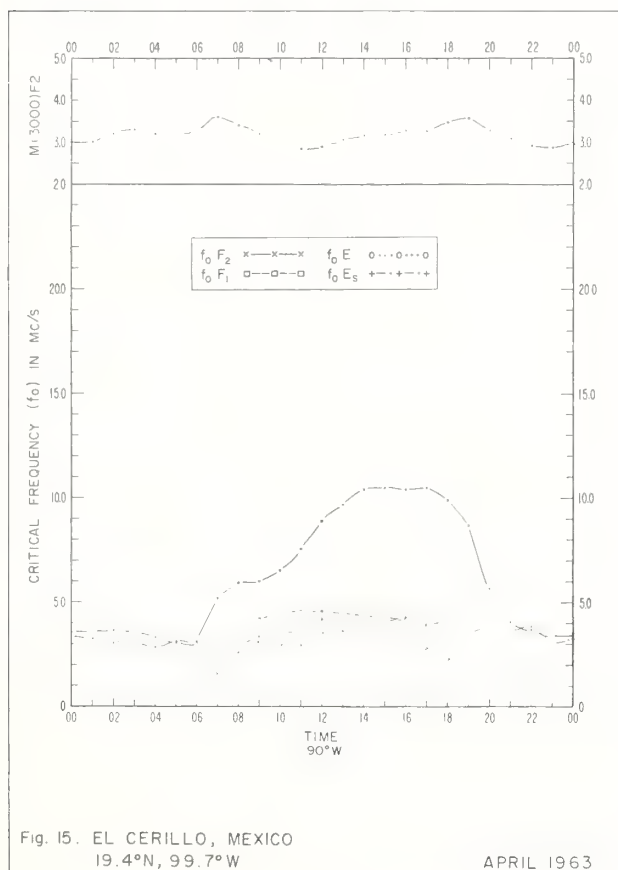
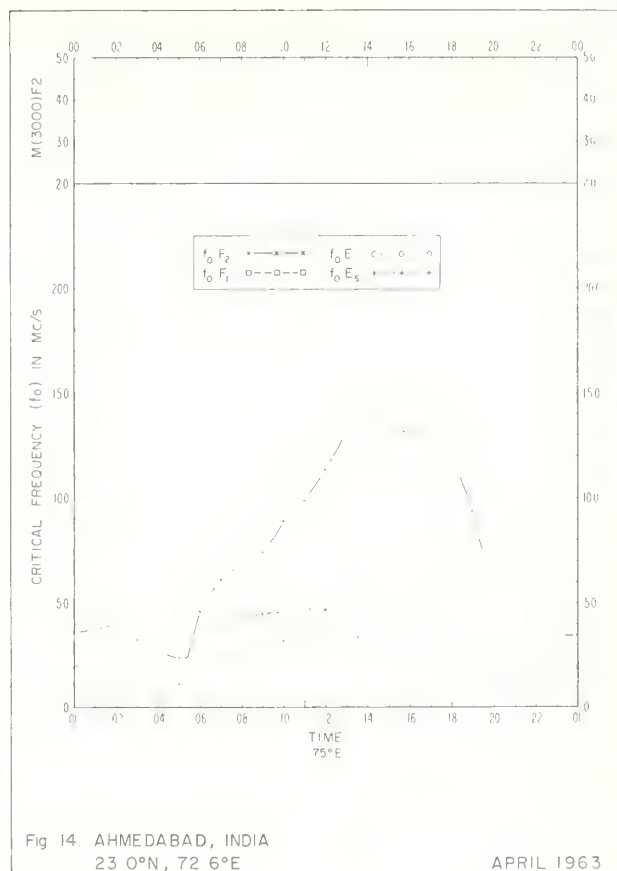
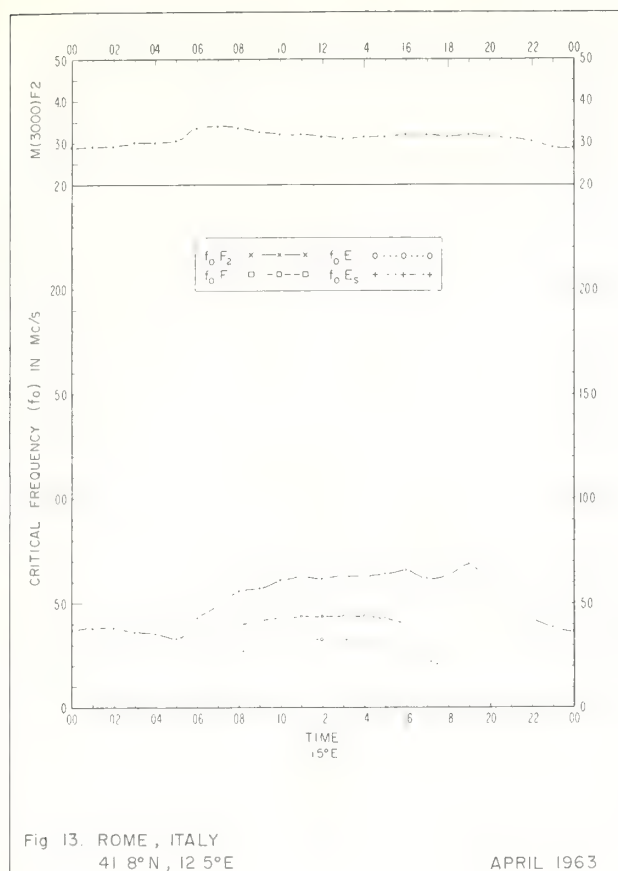
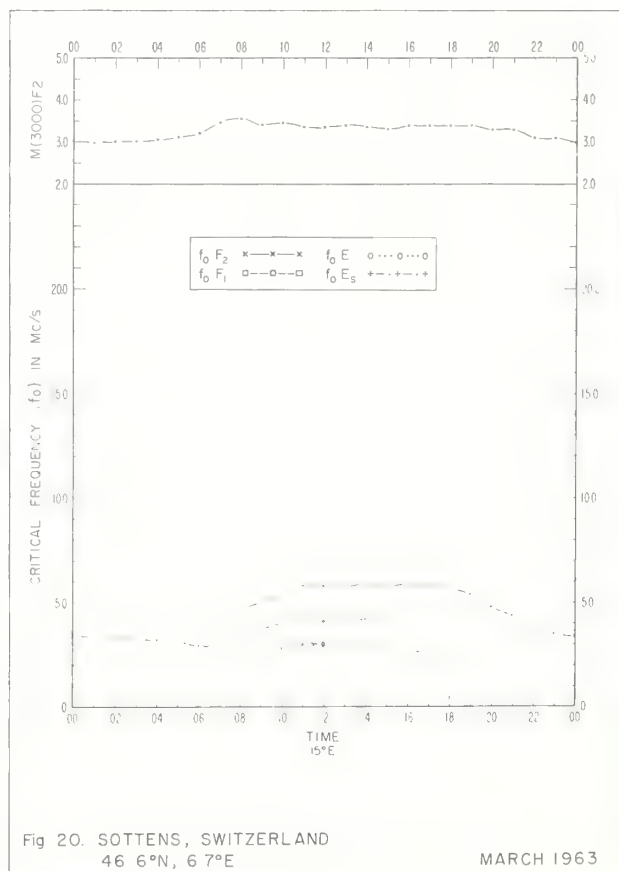
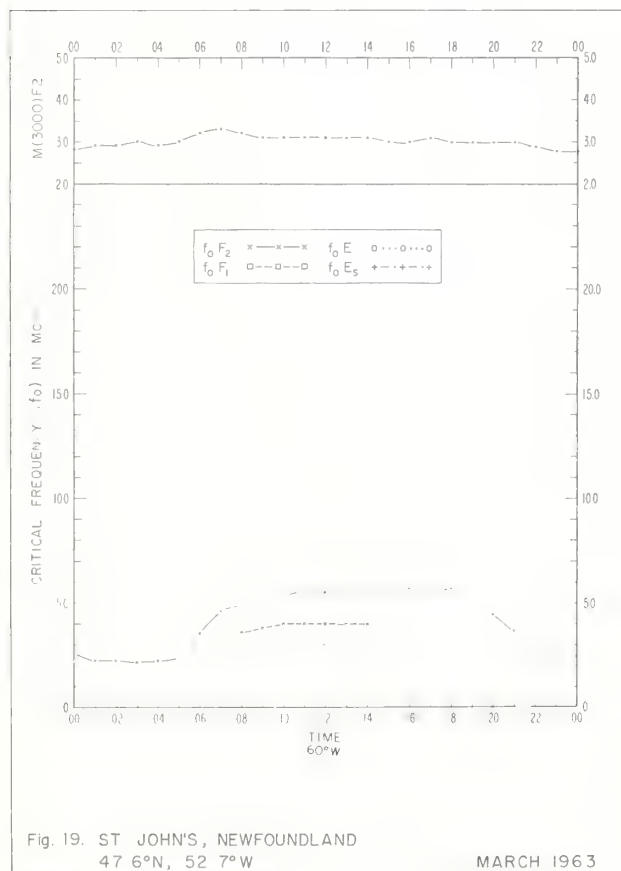
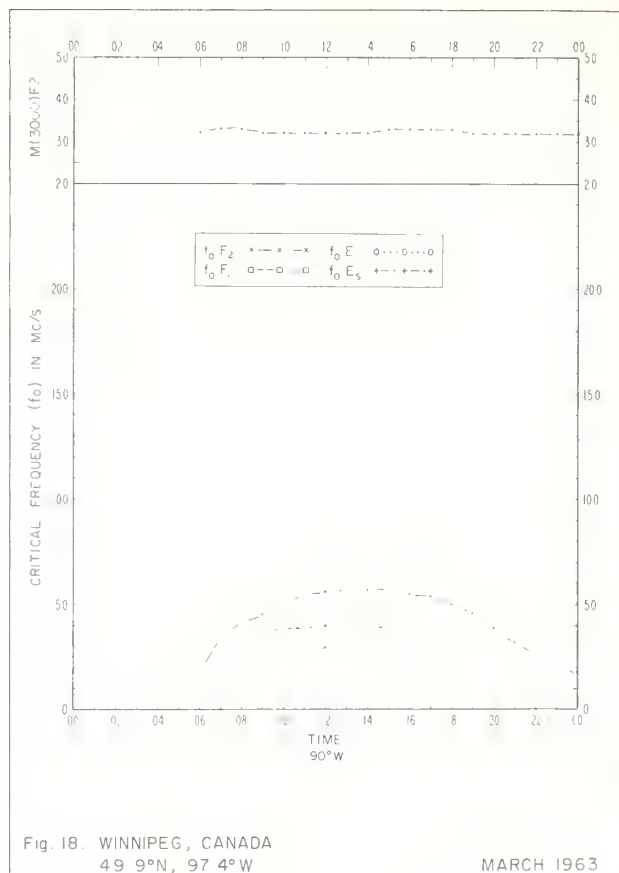
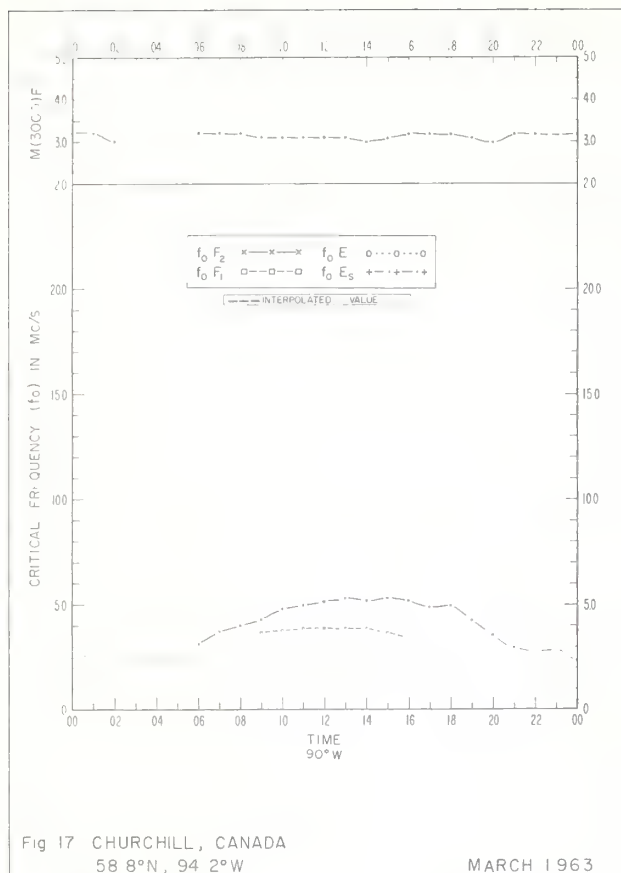


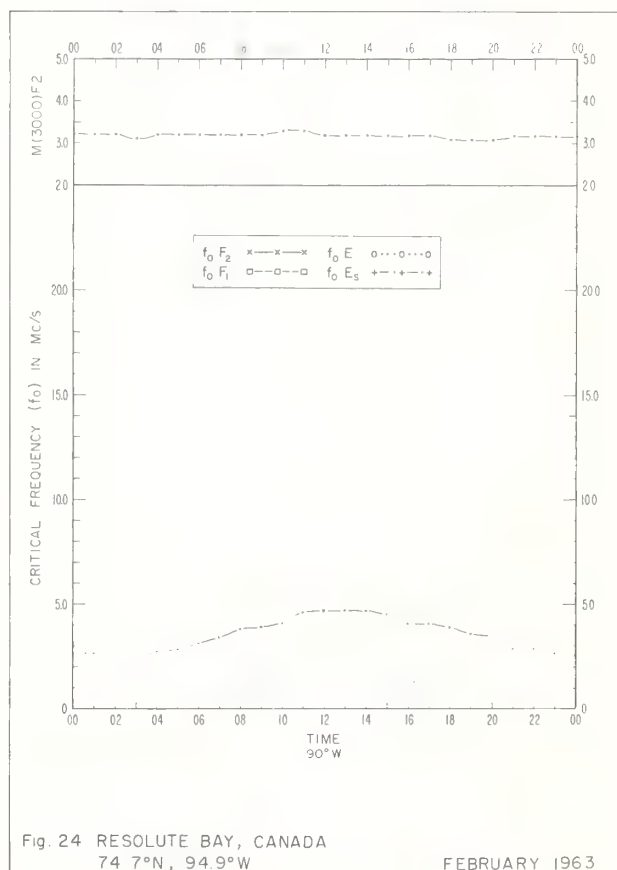
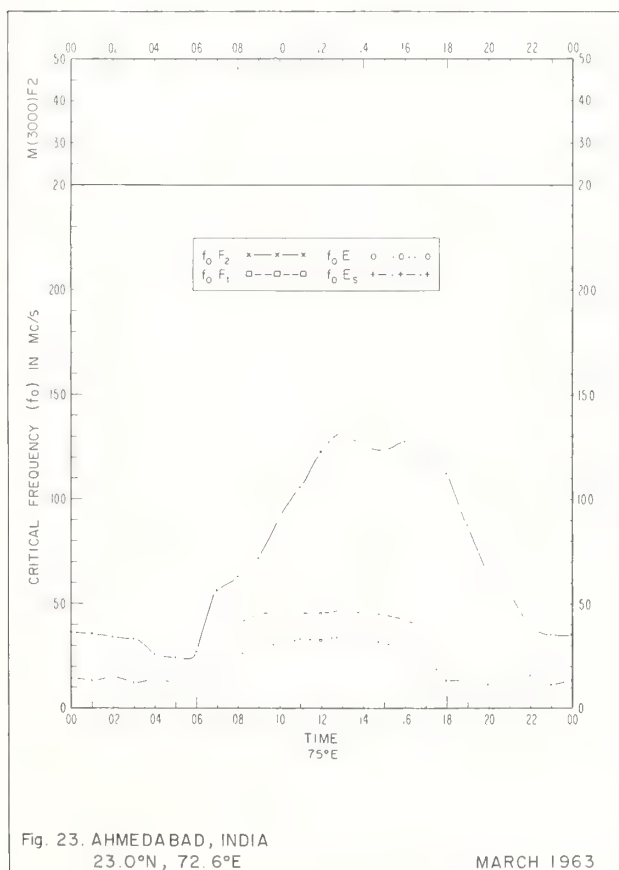
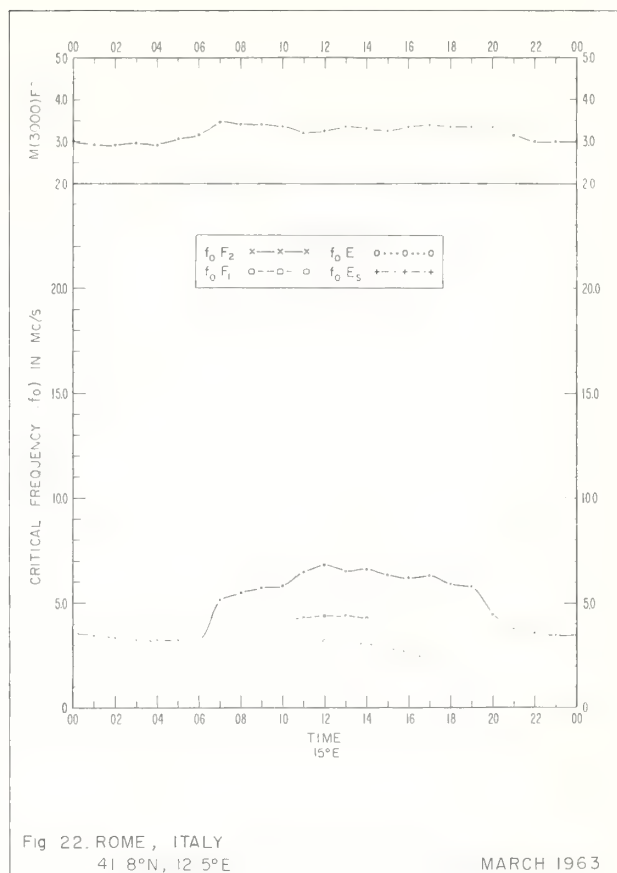
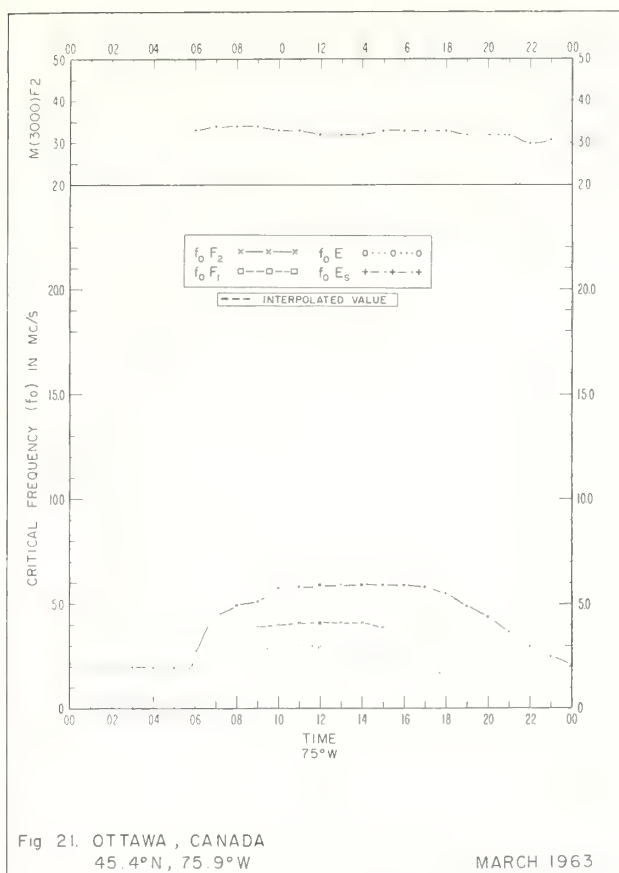
Fig. 8. BARROW, ALASKA
71 3°N, 156.8°W

MAY 1963









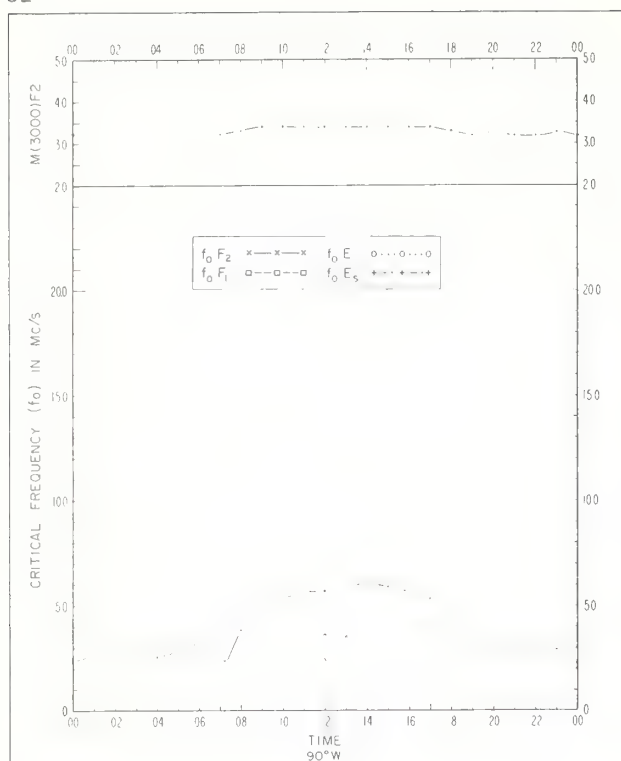


Fig. 25. CHURCHILL, CANADA
58°N, 94°W

FEBRUARY 1963

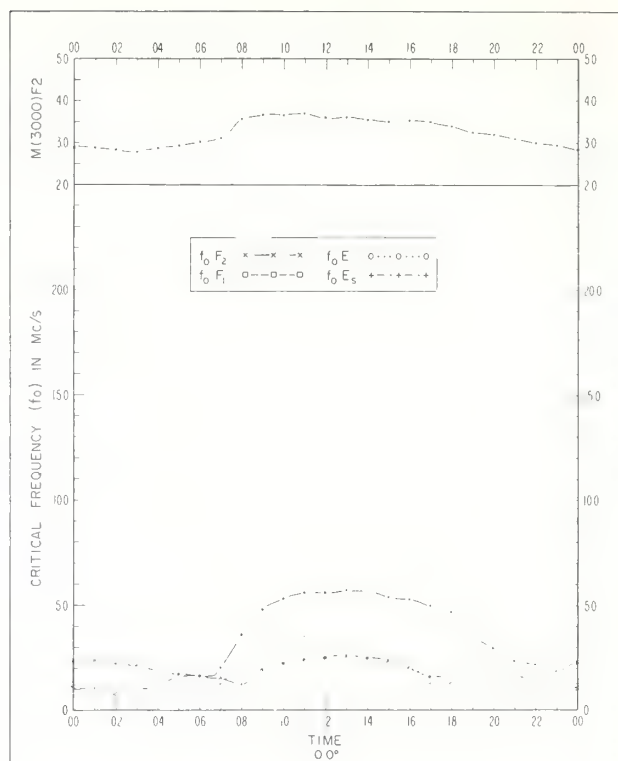


Fig. 26. INVERNESS, SCOTLAND
57°N, 4°W

FEBRUARY 1963

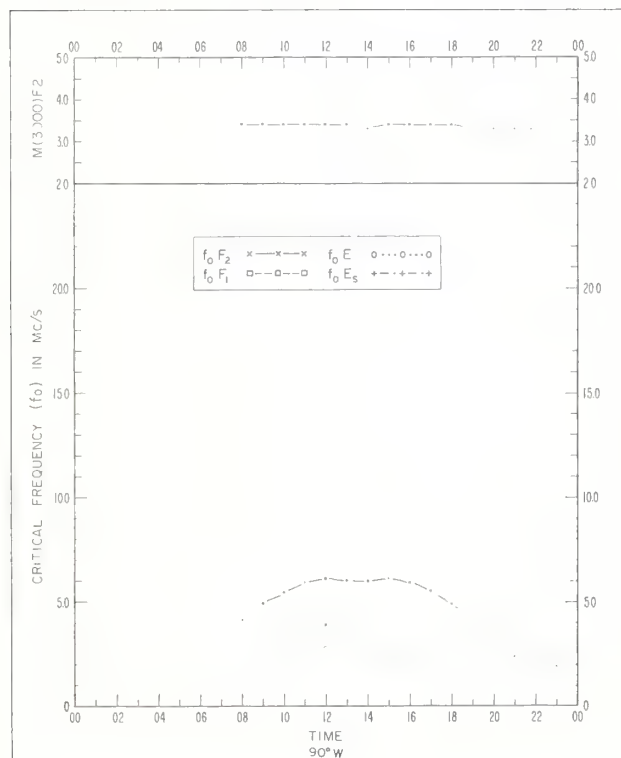


Fig. 27. WINNIPEG, CANADA
49°N, 97°W

FEBRUARY 1963

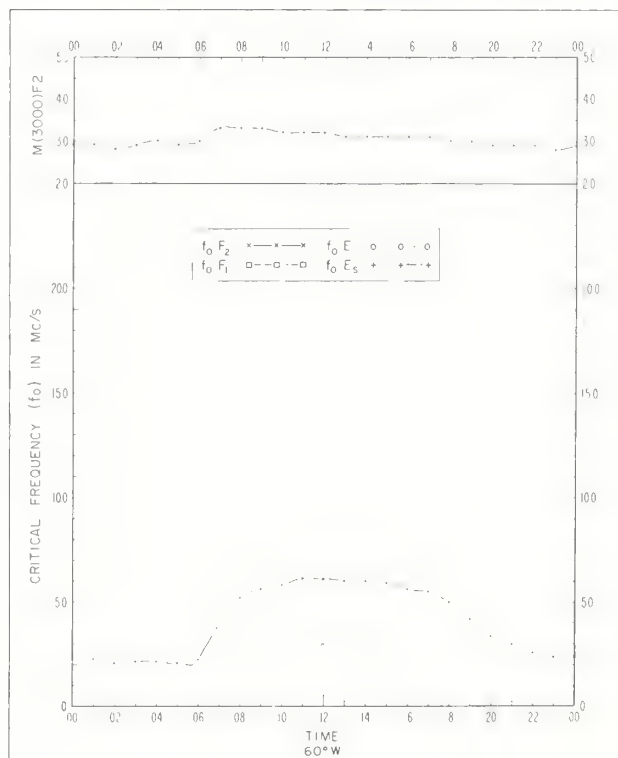
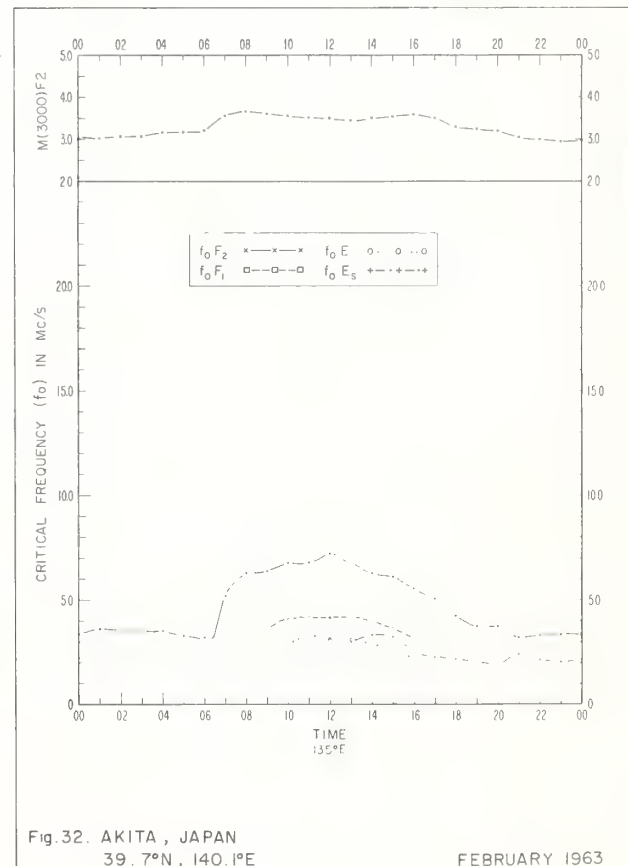
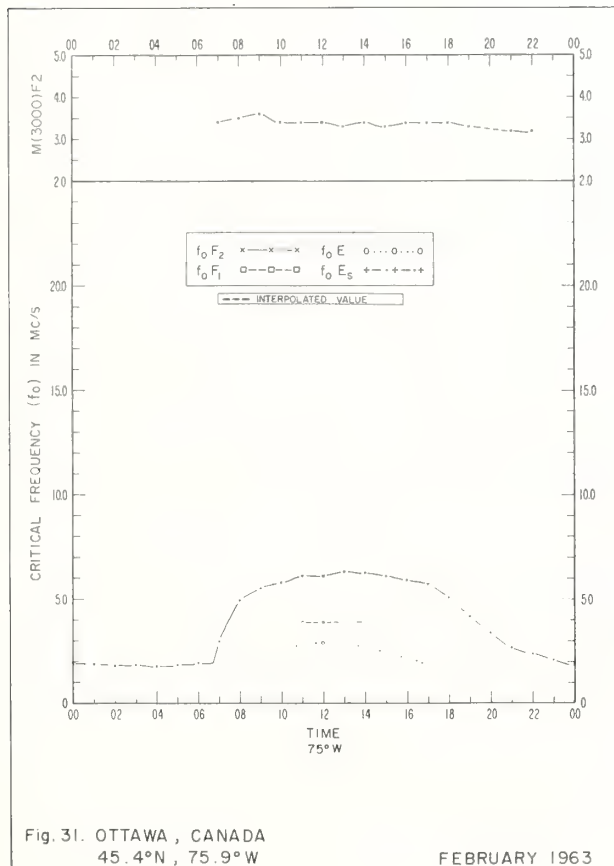
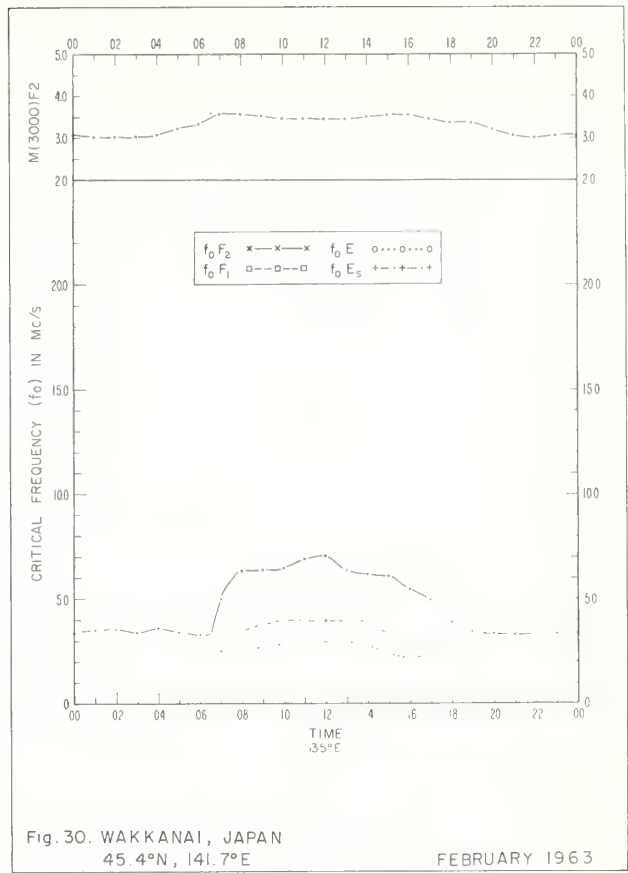
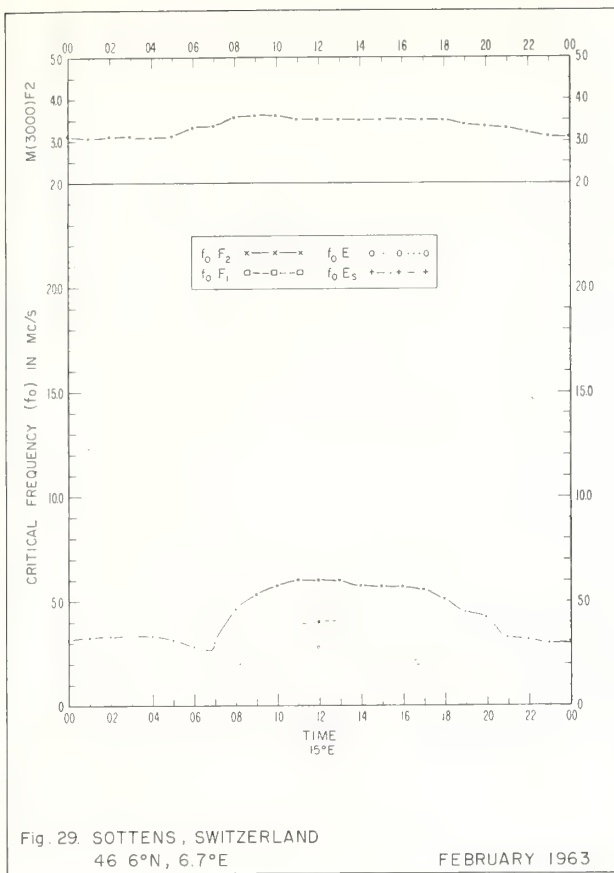


Fig. 28. ST JOHN'S, NEWFOUNDLAND
47°N, 52°W

FEBRUARY 1963



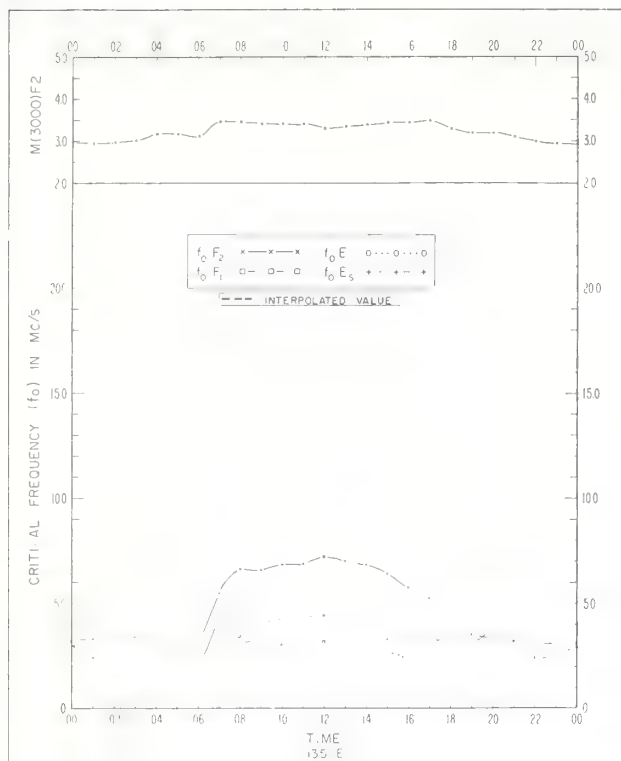


Fig 33 KOKUBUNJI, TOKYO, JAPAN
35.7°N, 139.5°E

FEBRUARY 1963

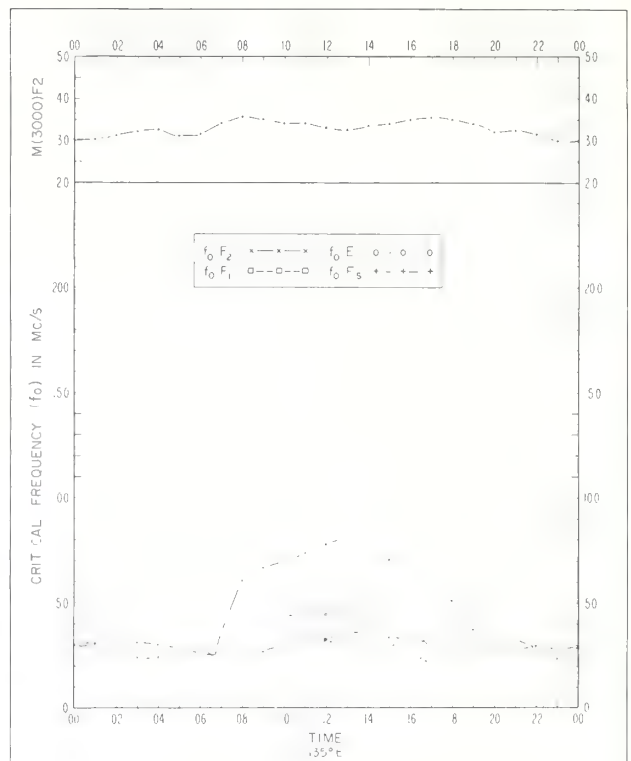


Fig 34. YAMAGAWA, JAPAN
31.2°N, 130.6°E

FEBRUARY 1963

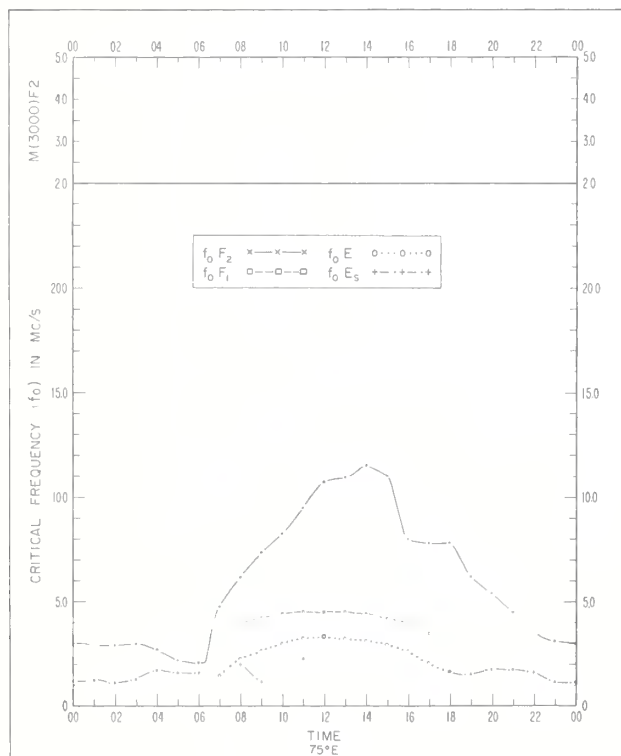


Fig 35 AHMEDABAD, INDIA
23.0°N, 72.6°E

FEBRUARY 1963

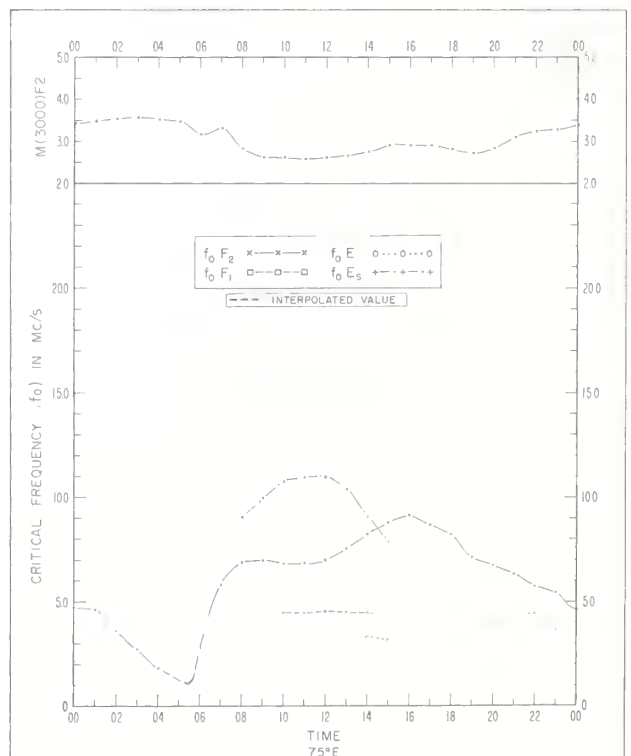
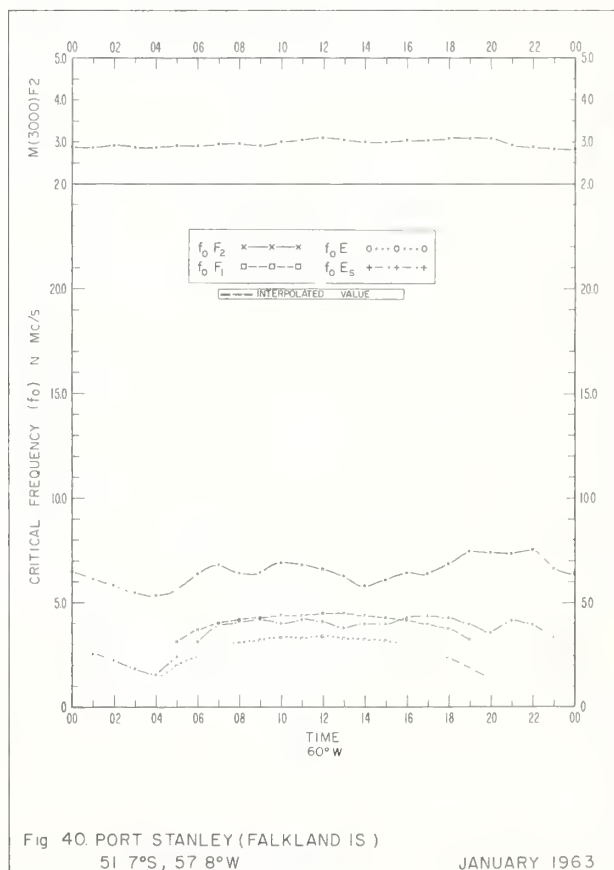
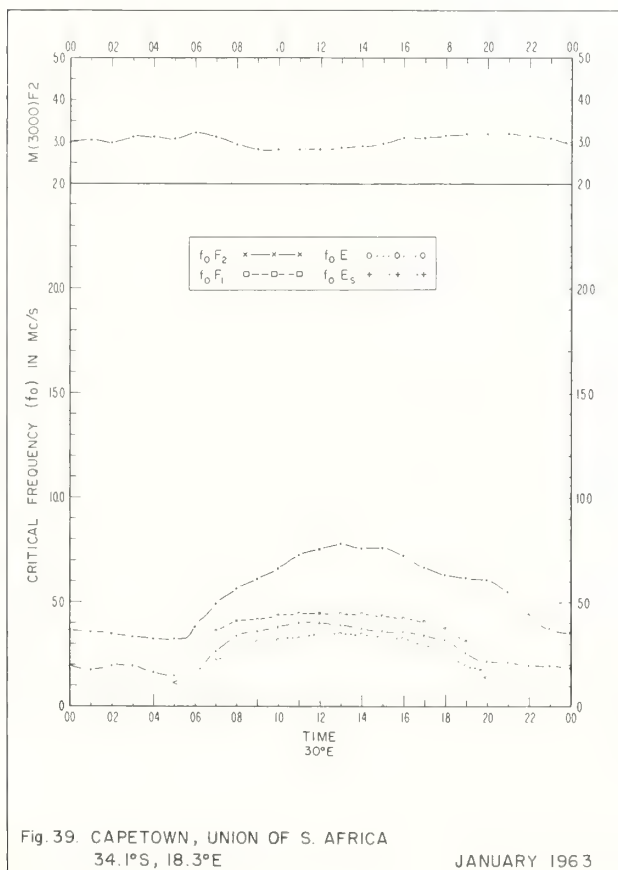
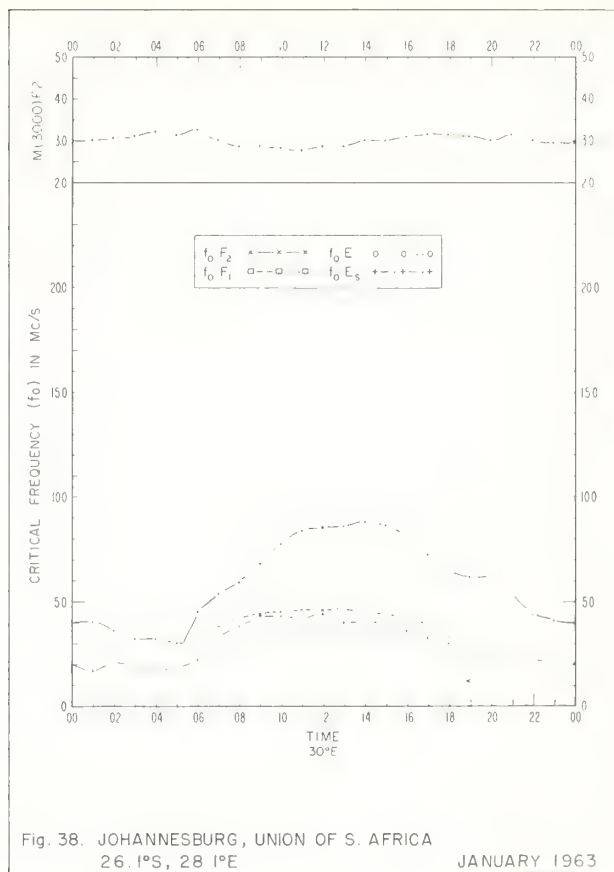
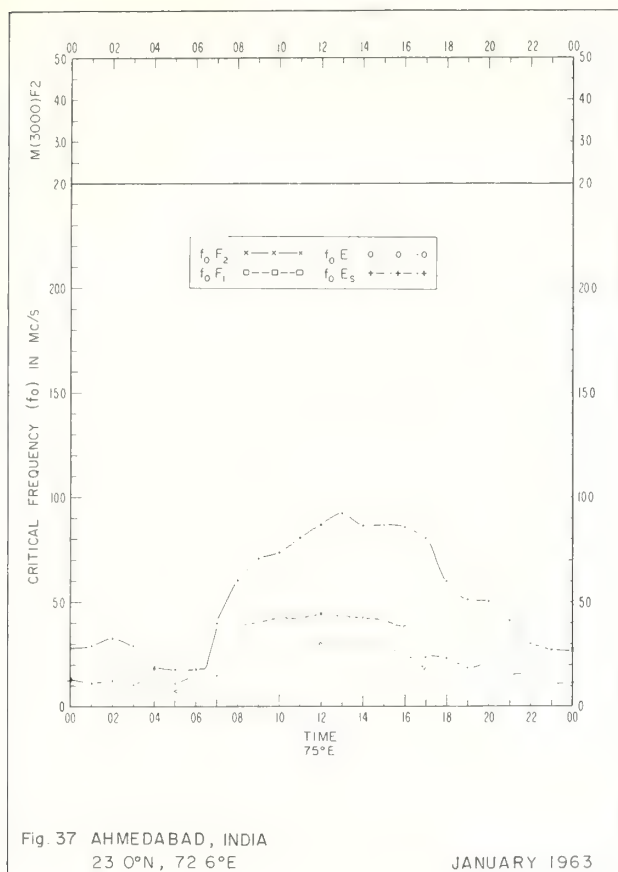
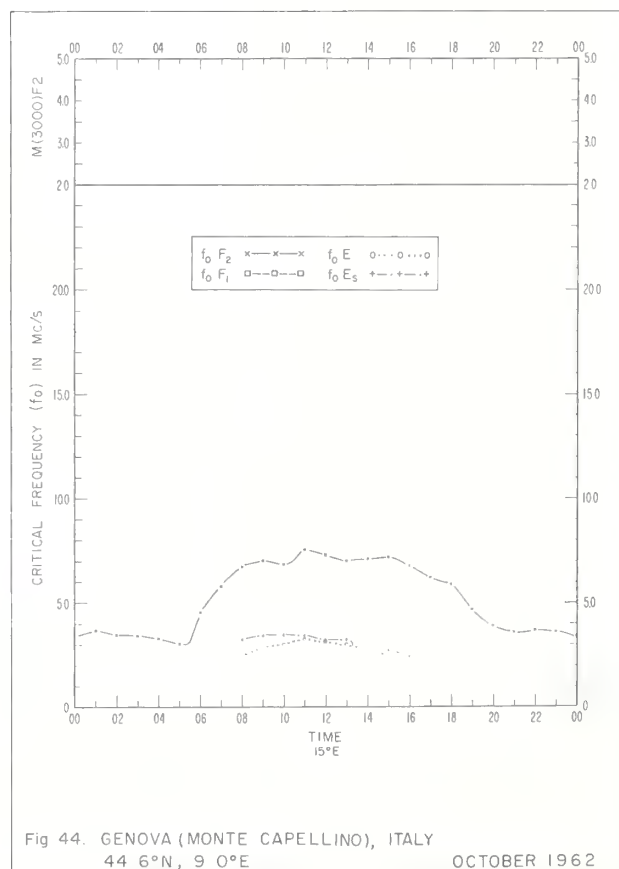
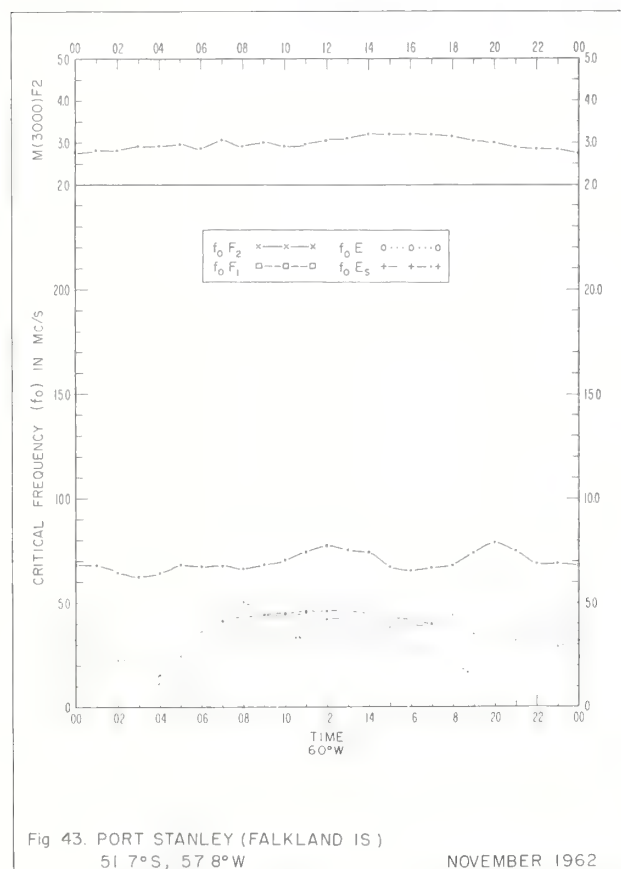
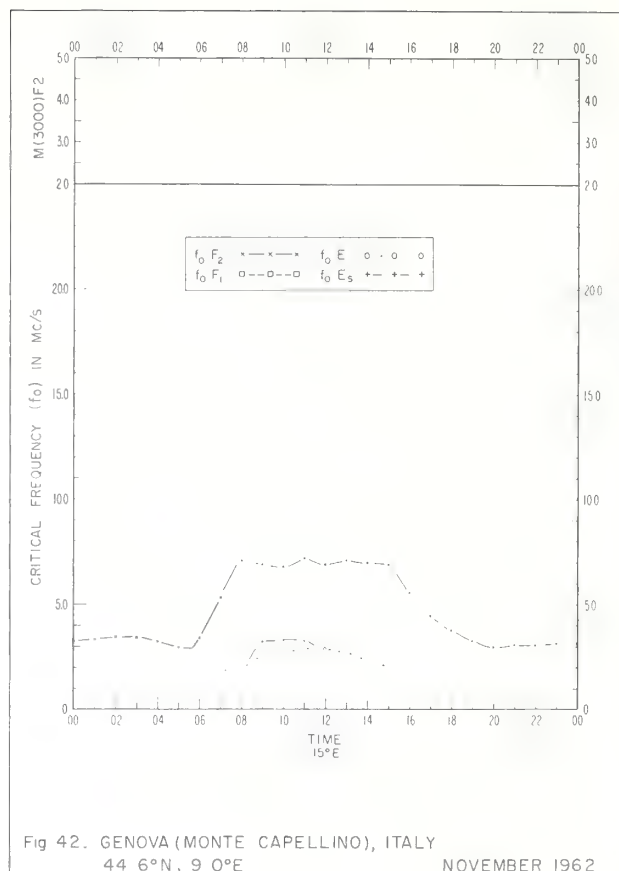
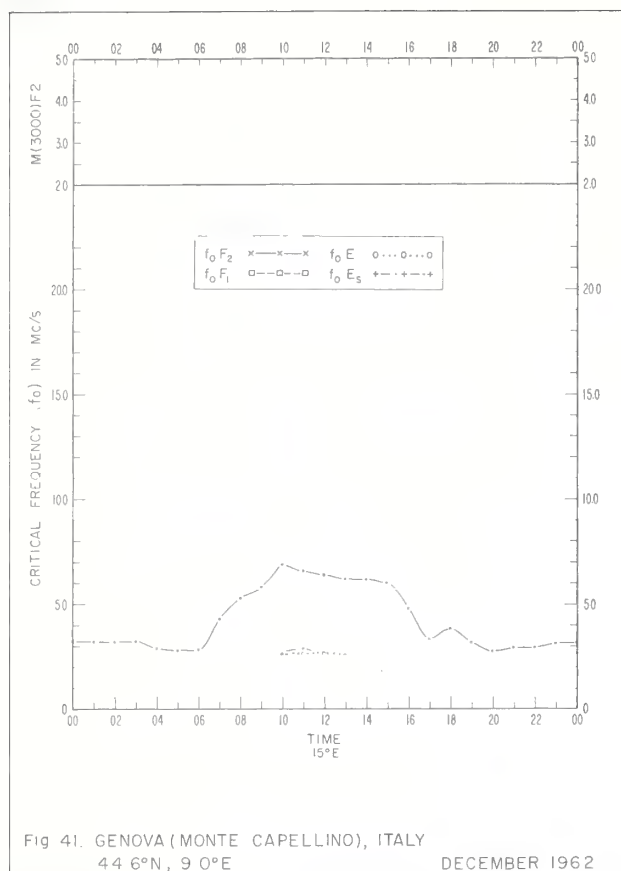
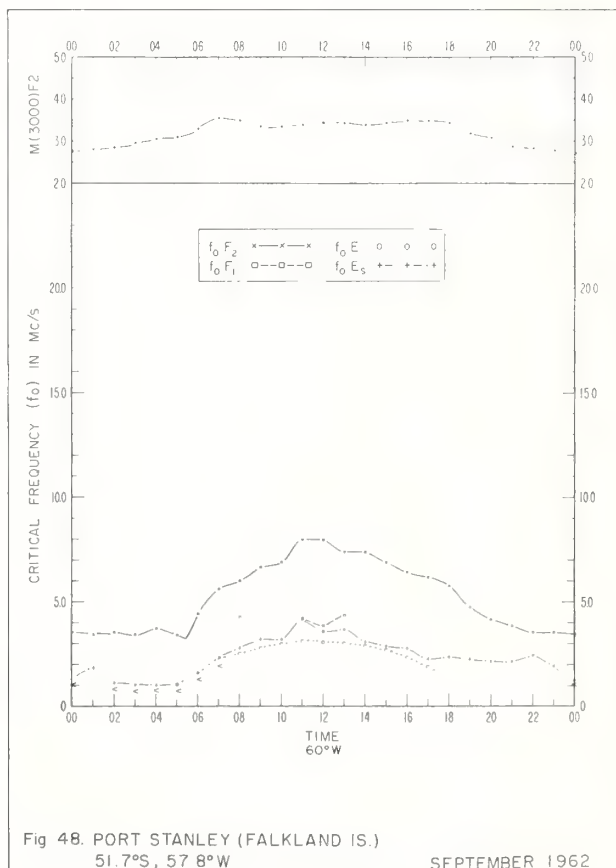
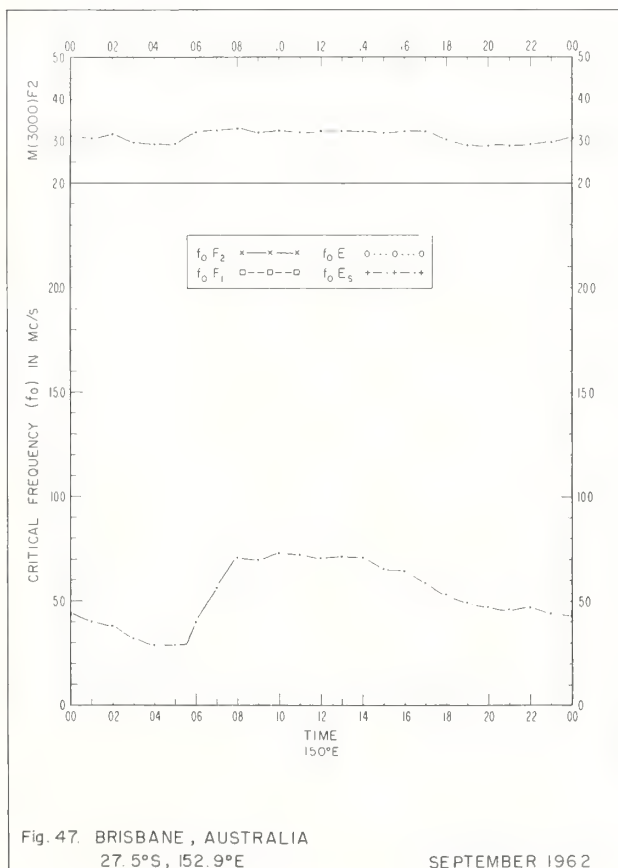
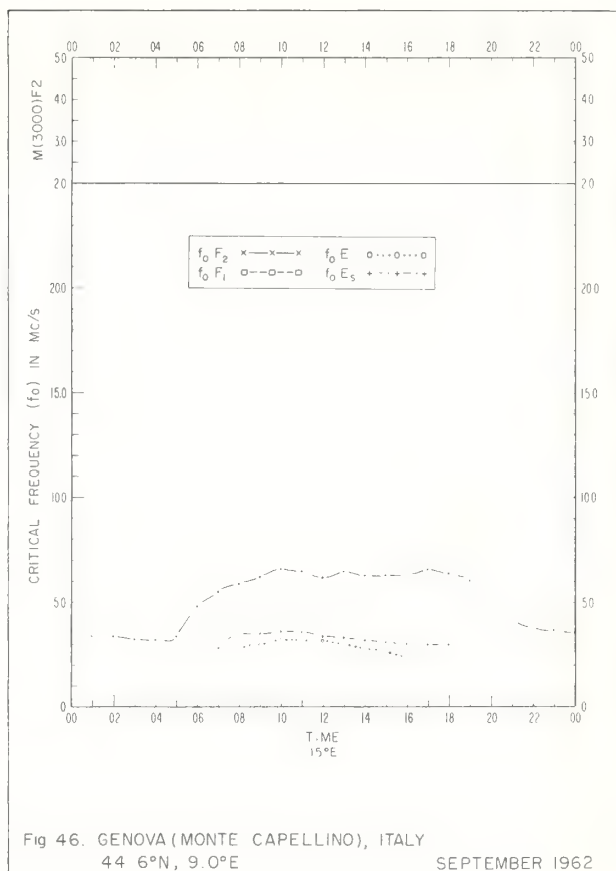
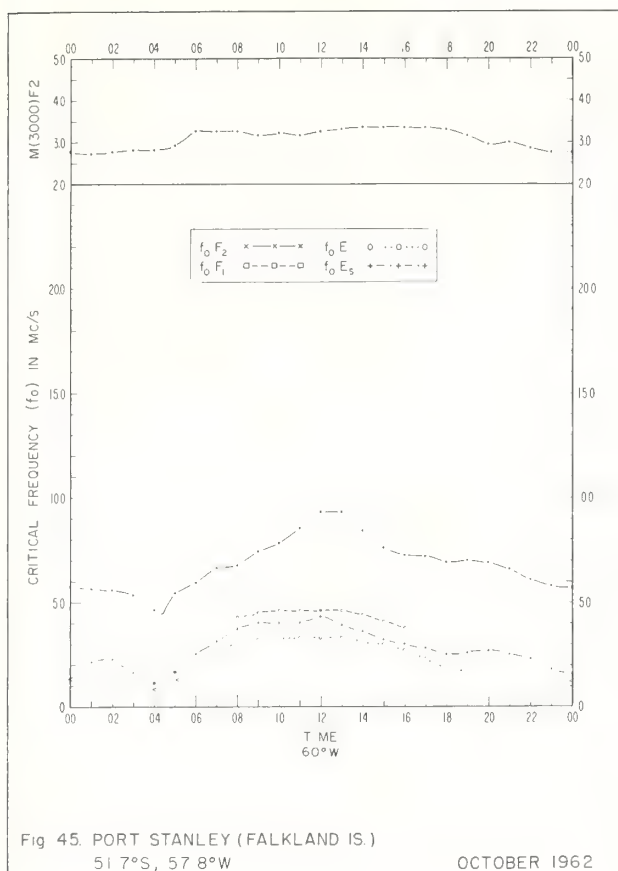


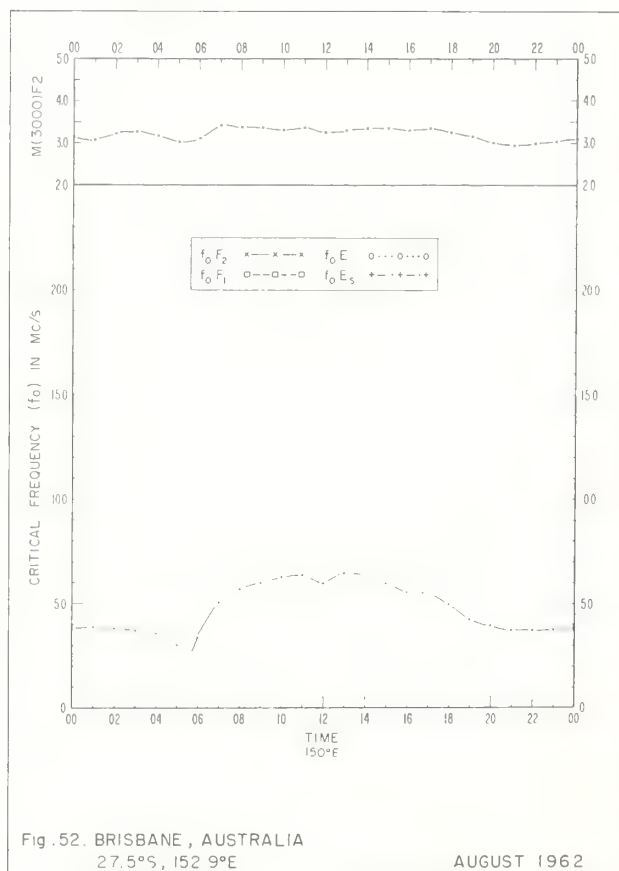
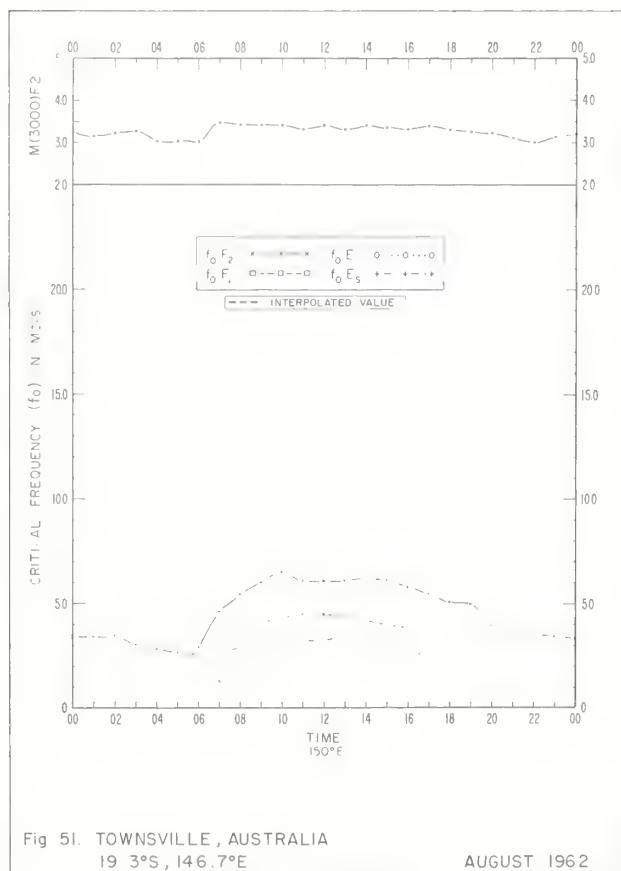
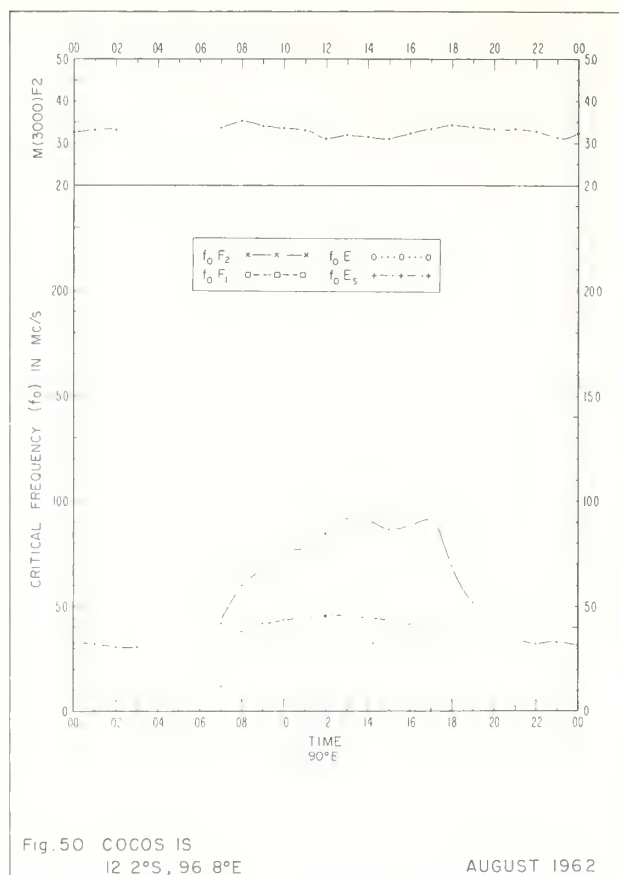
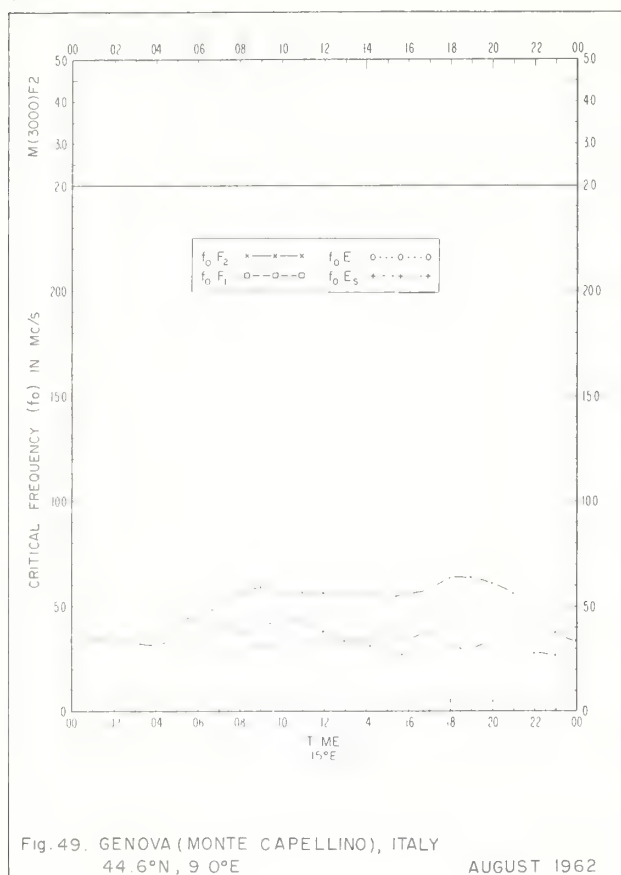
Fig 36. KODAIKANAL, INDIA
10.2°N, 77.5°E

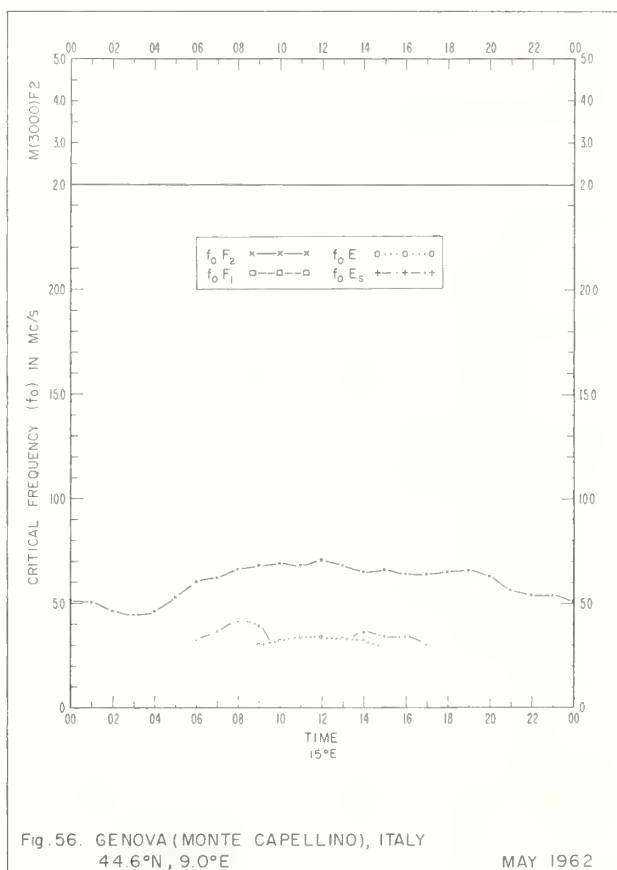
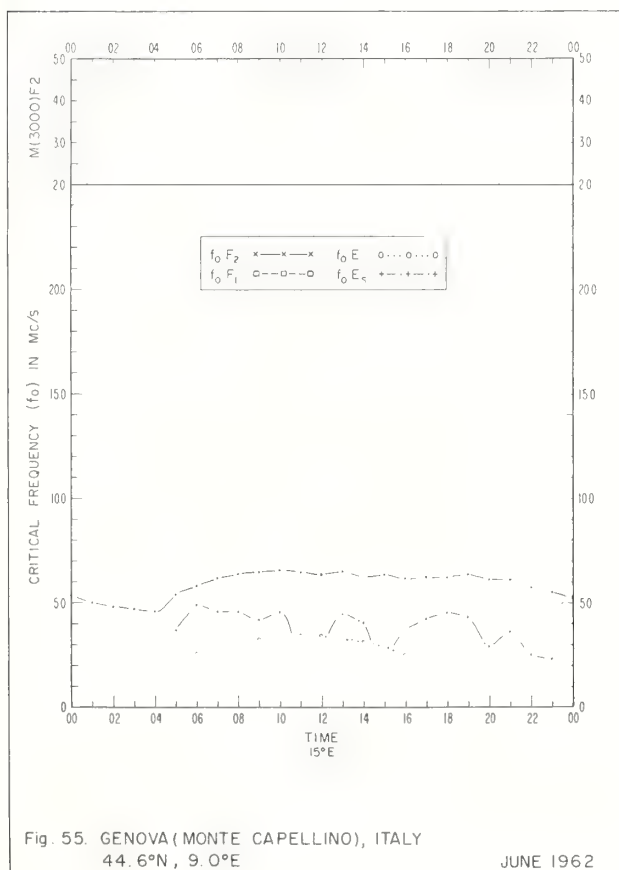
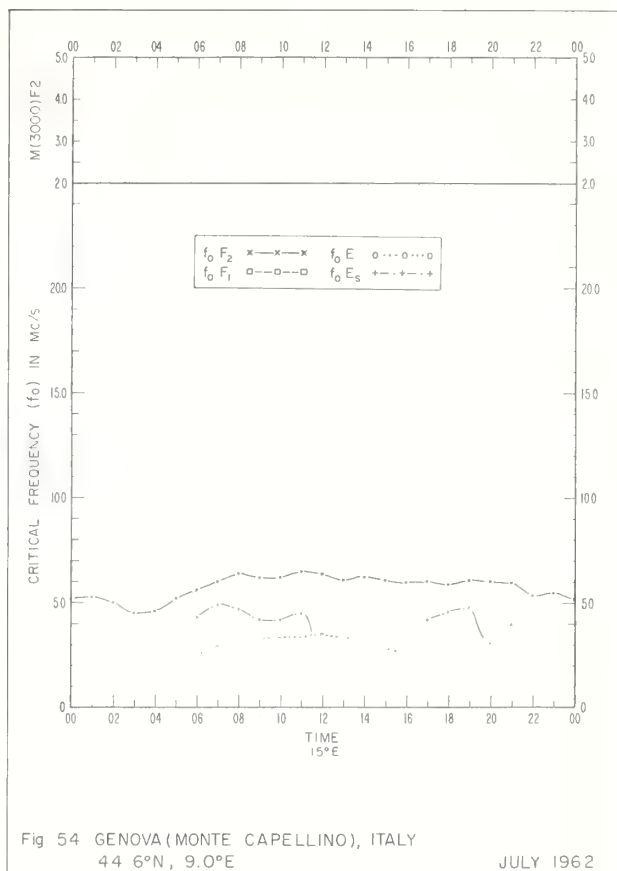
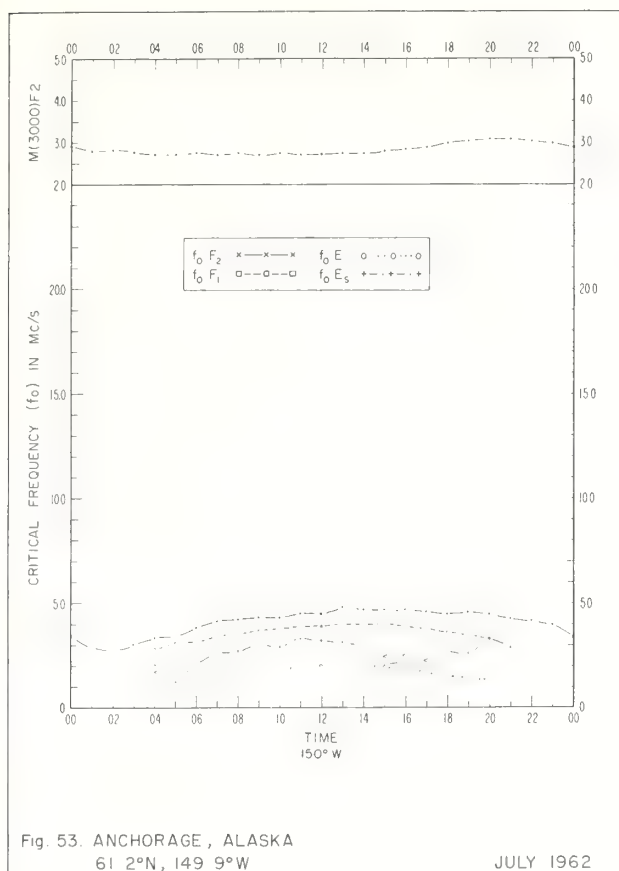
FEBRUARY 1963

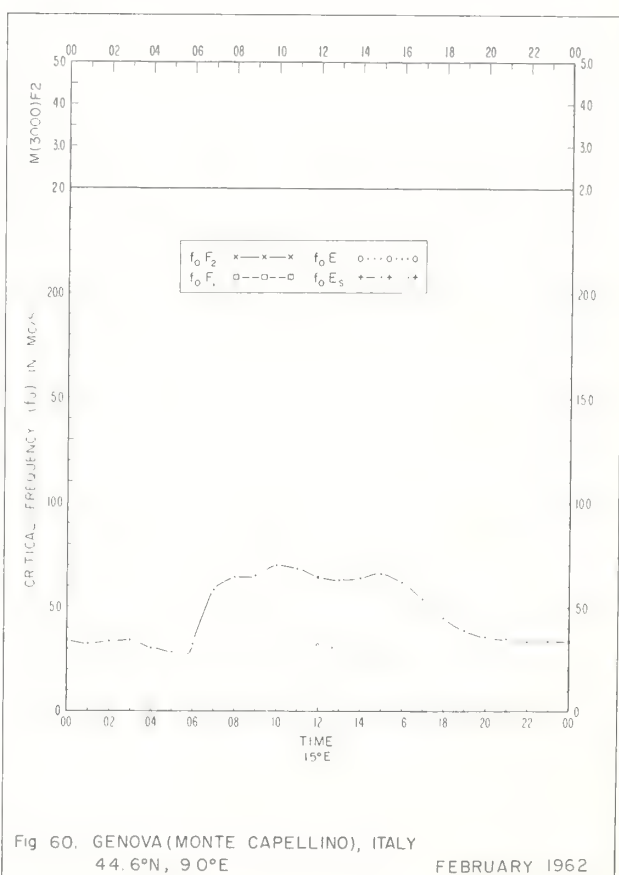
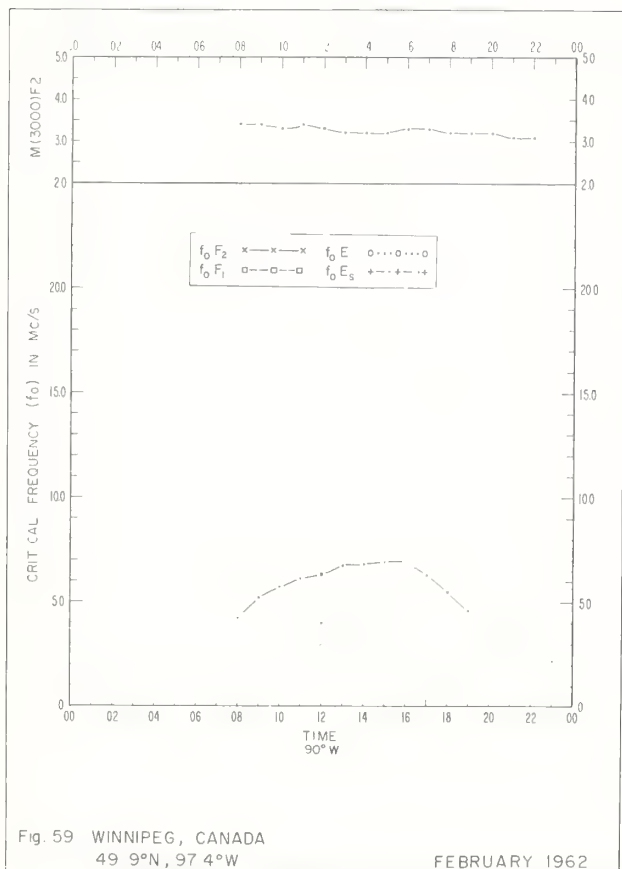
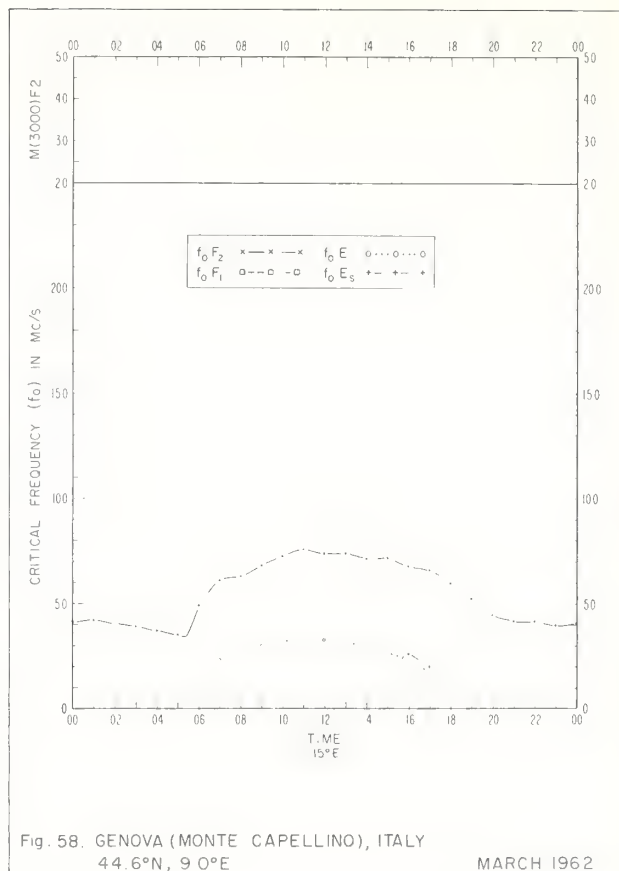
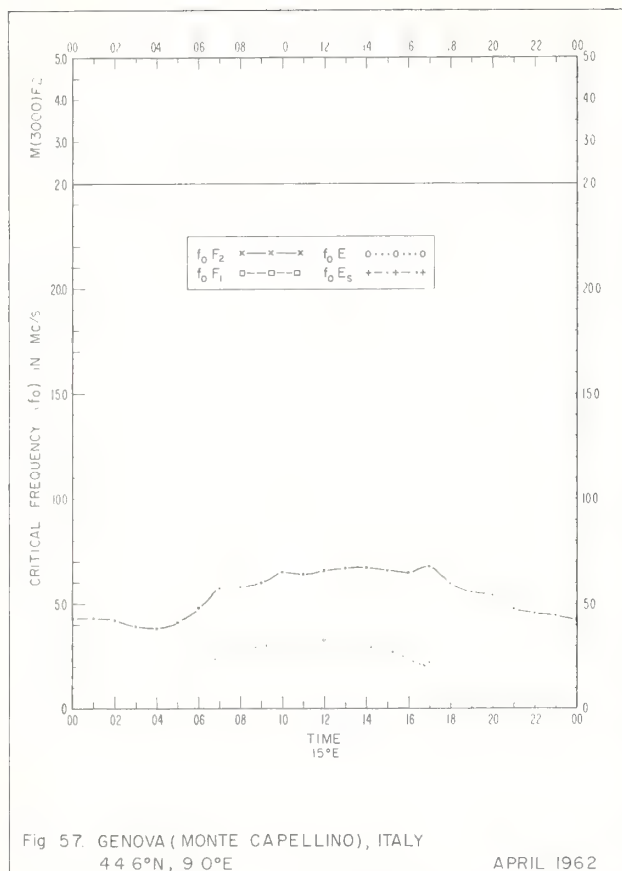


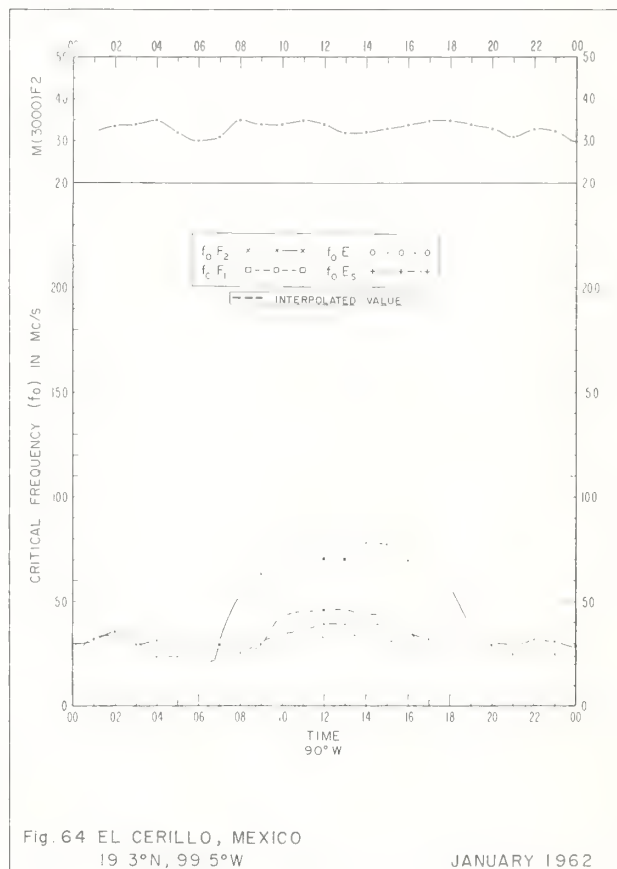
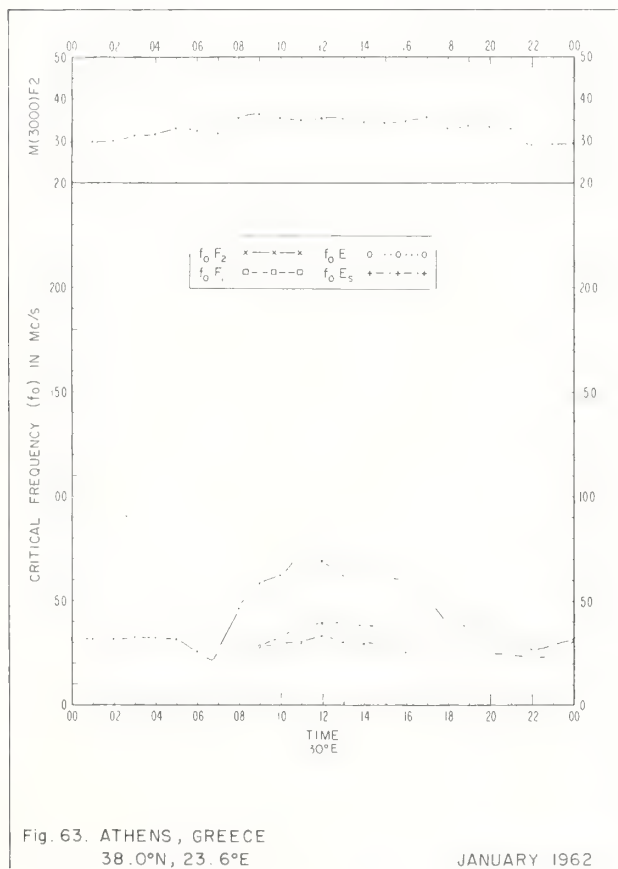
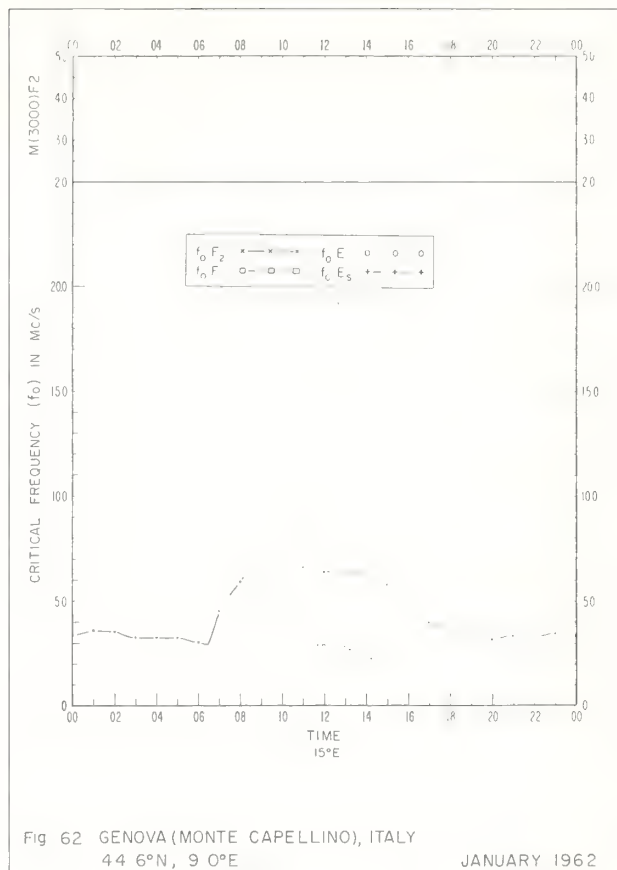
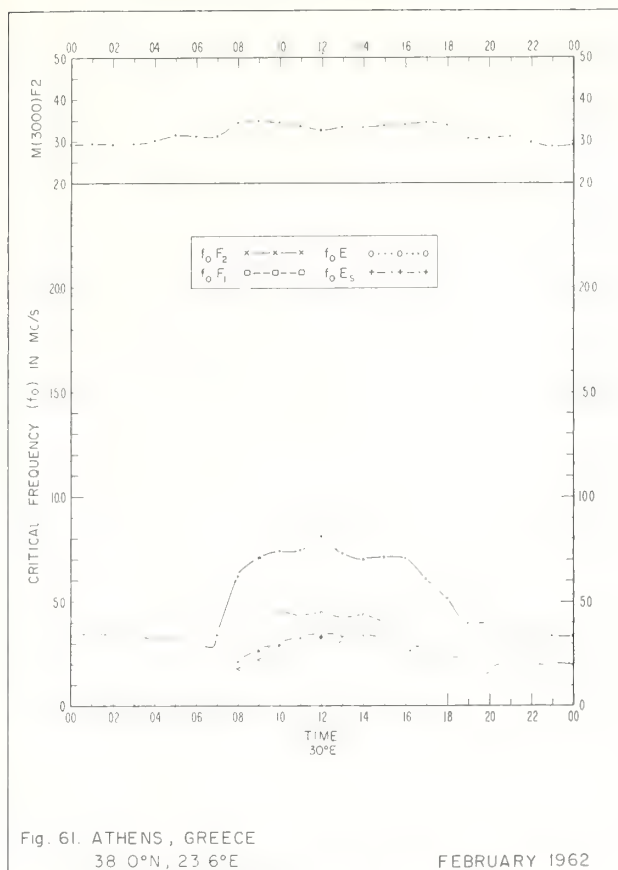












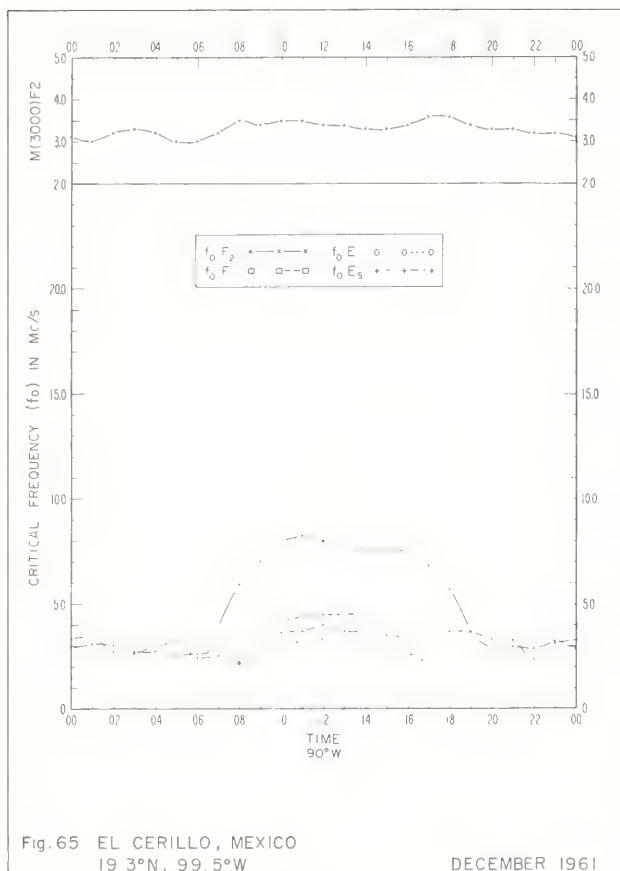


Fig. 65 EL CERILLO, MEXICO
19°3'N, 99°5'W

DECEMBER 1961

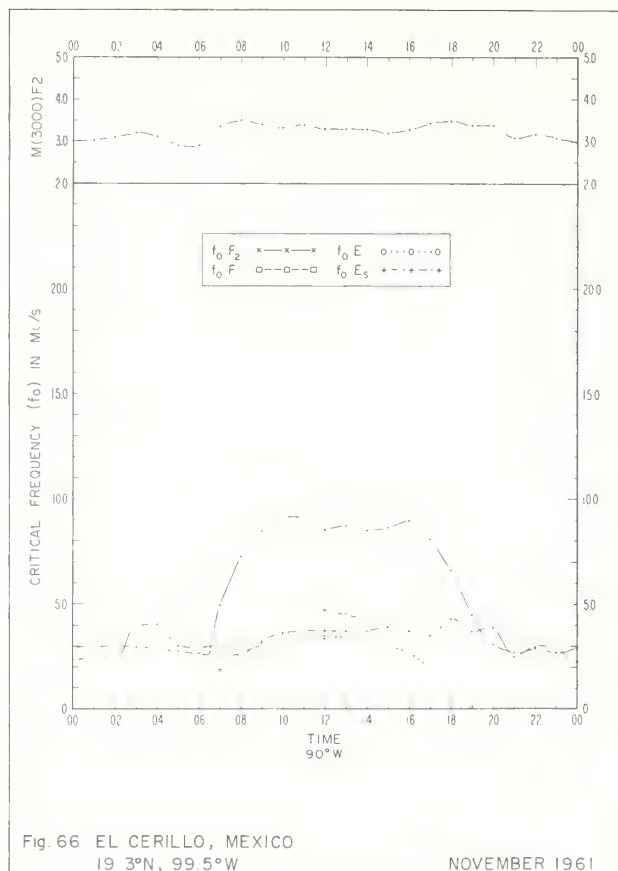


Fig. 66 EL CERILLO, MEXICO
19°3'N, 99°5'W

NOVEMBER 1961

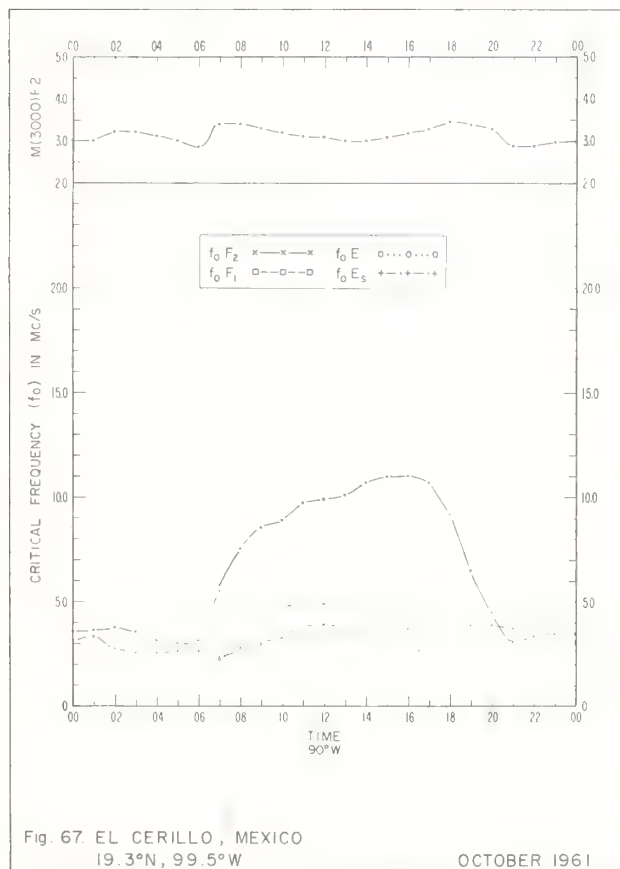


Fig. 67 EL CERILLO, MEXICO
19°3'N, 99°5'W

OCTOBER 1961

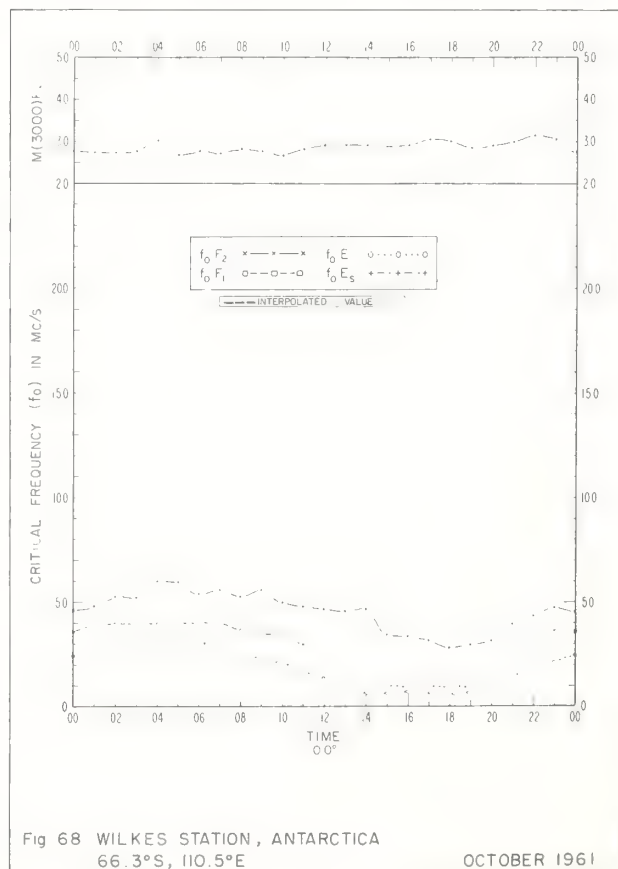
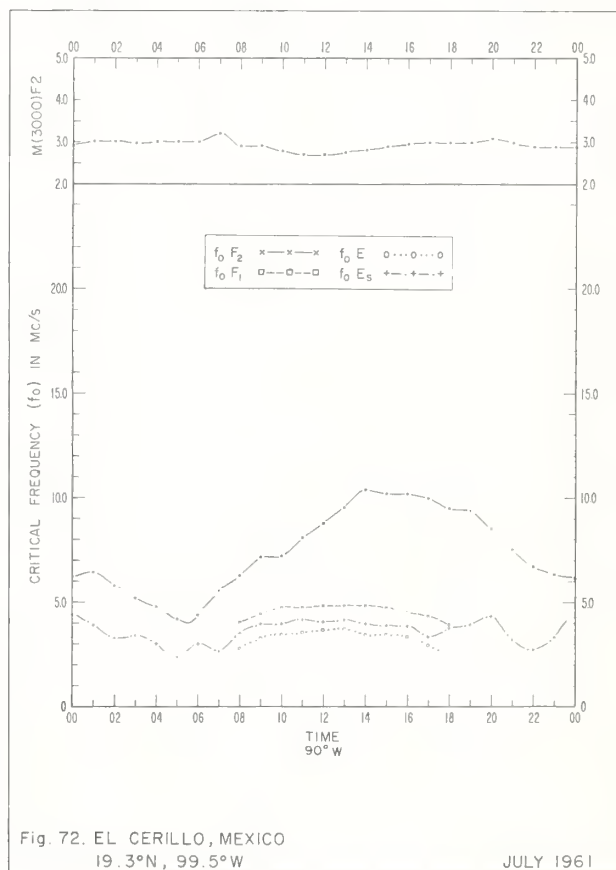
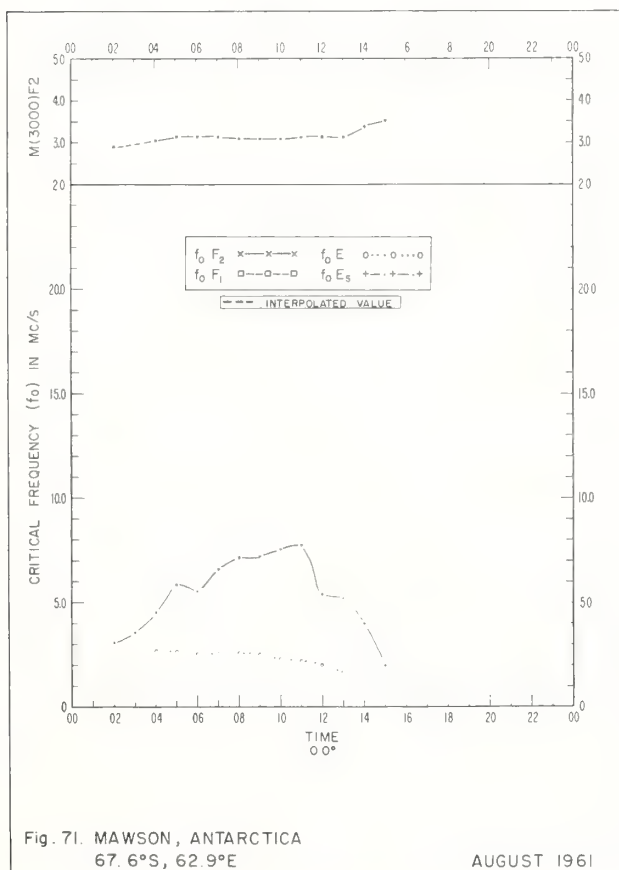
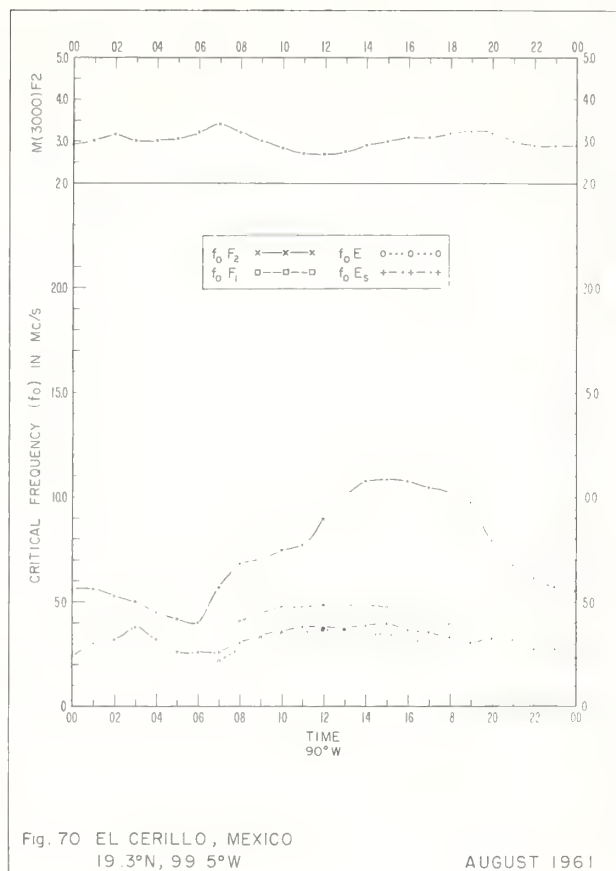
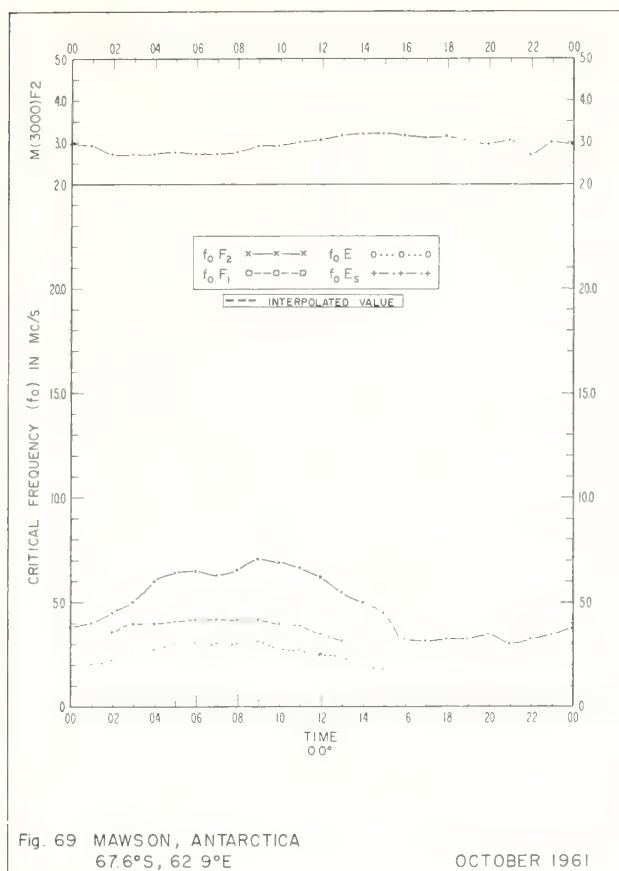
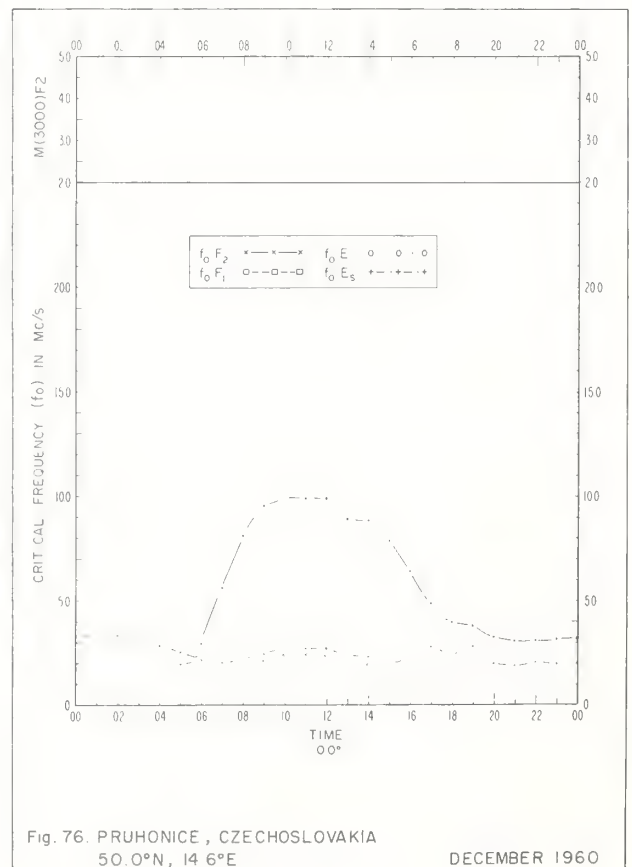
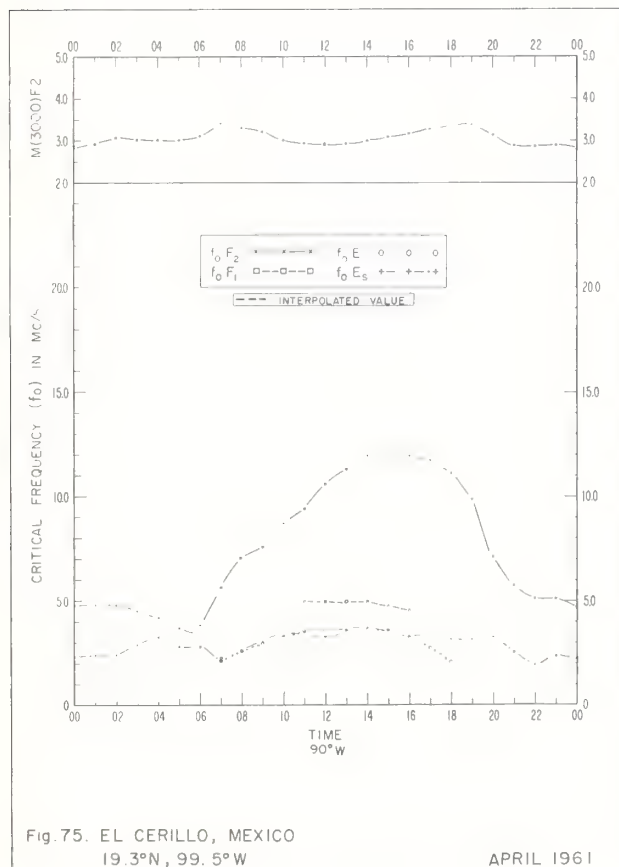
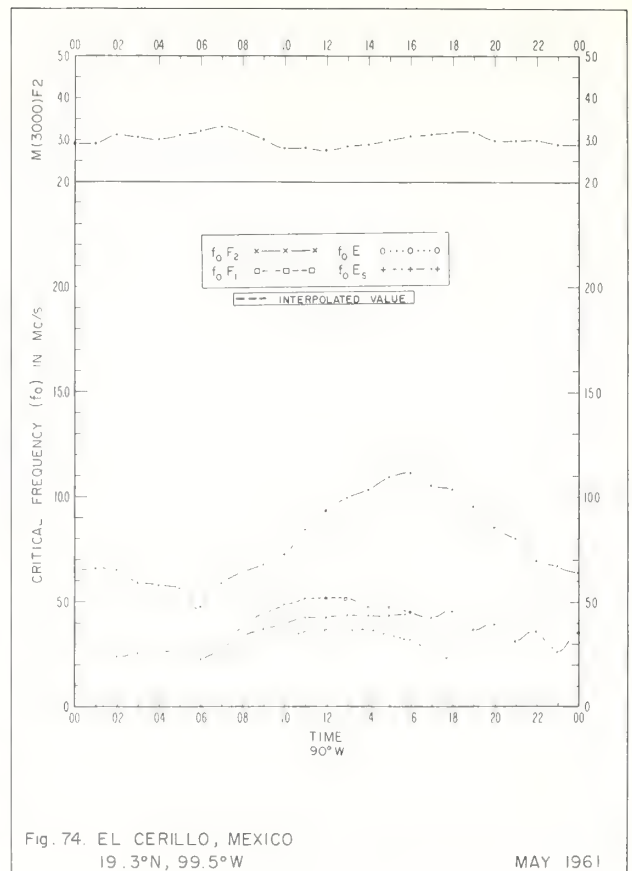
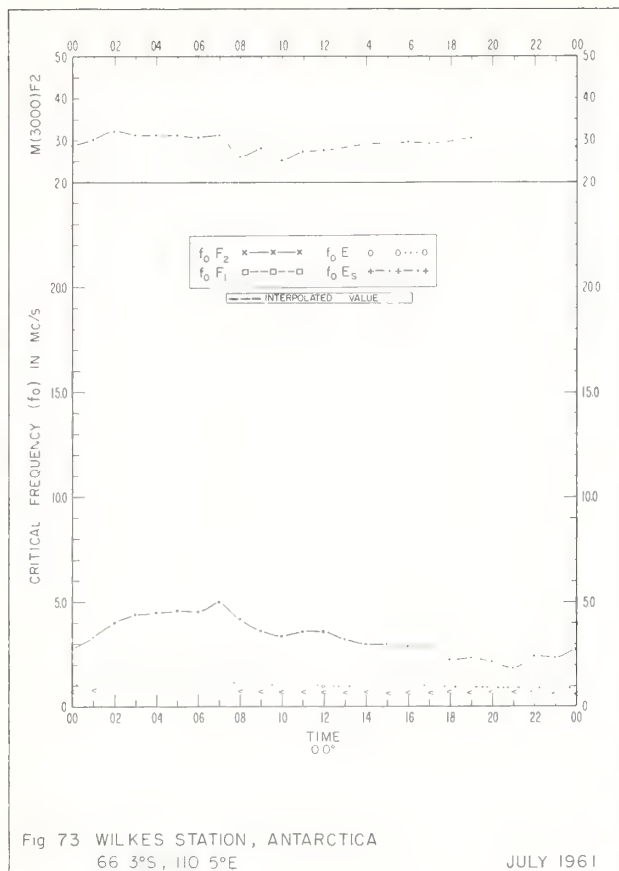
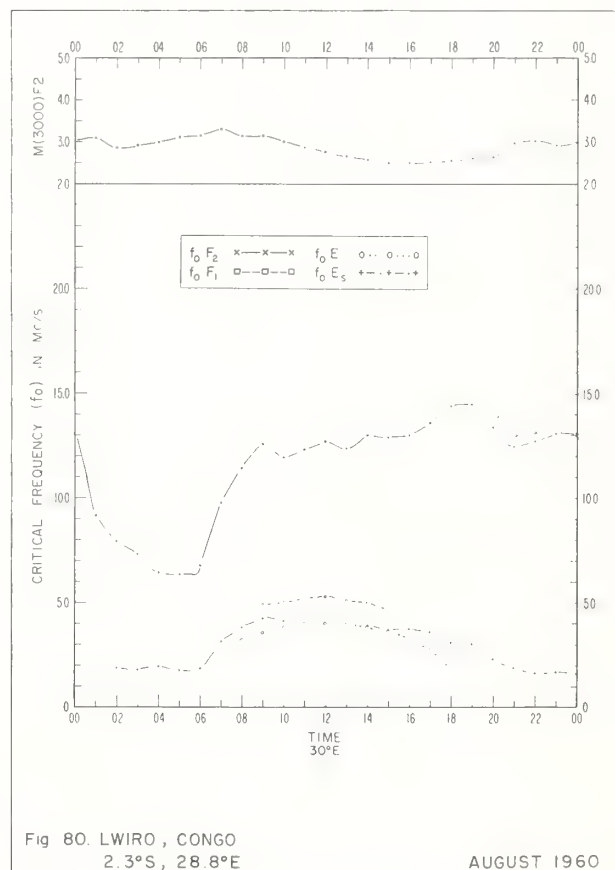
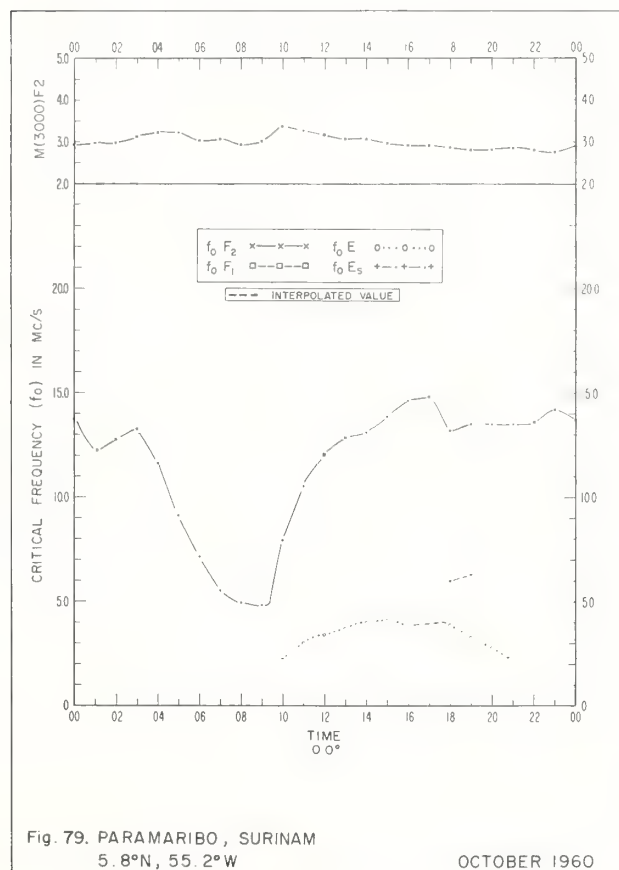
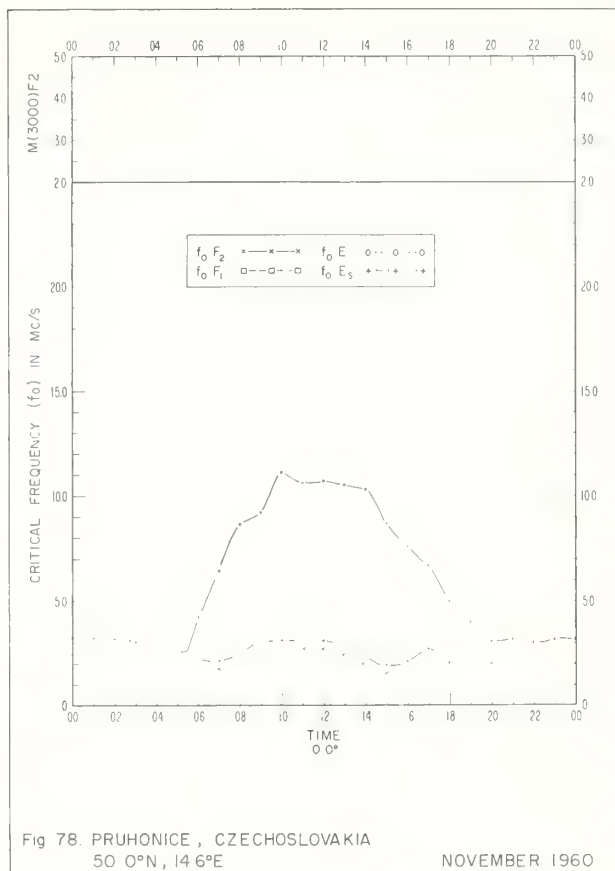
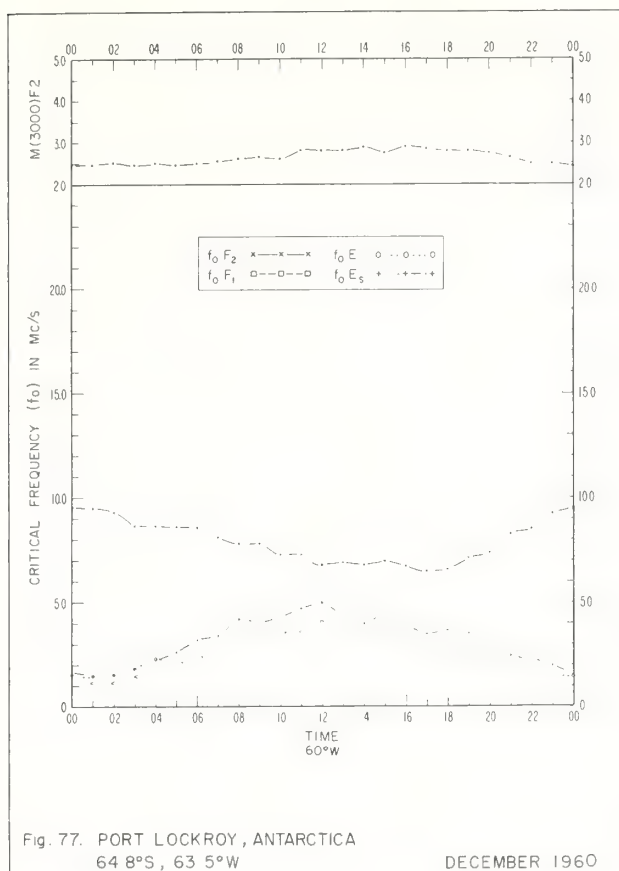


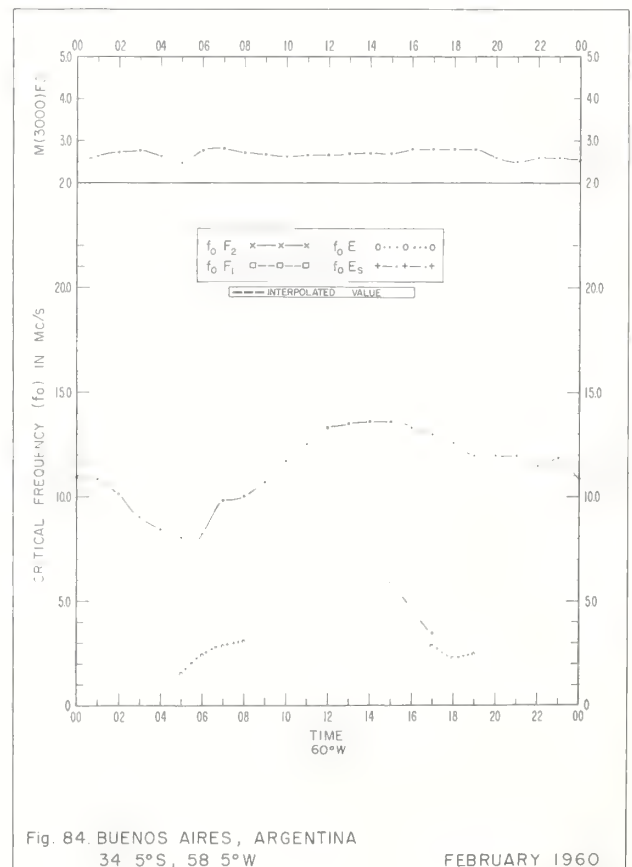
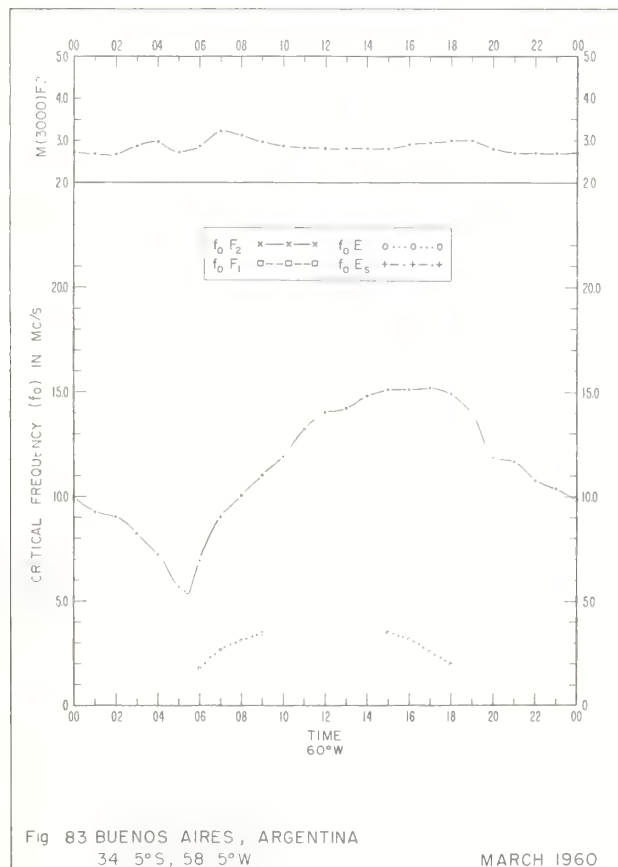
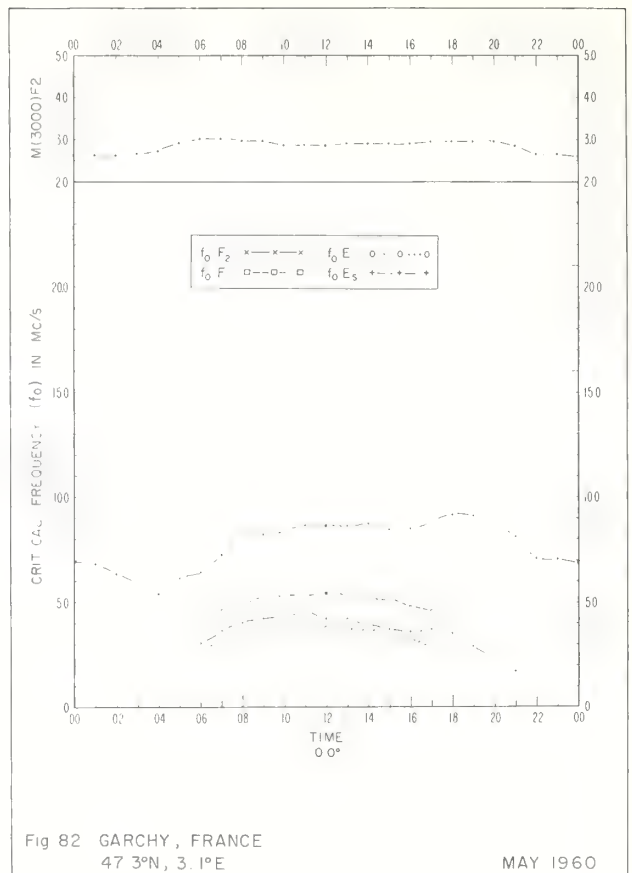
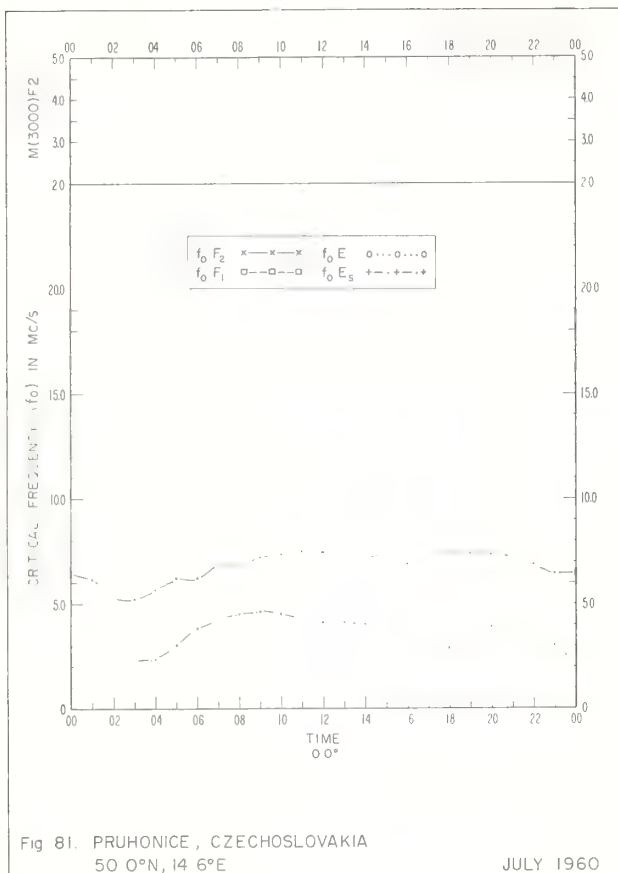
Fig. 68 WILKES STATION, ANTARCTICA
66°3'S, 110°5'E

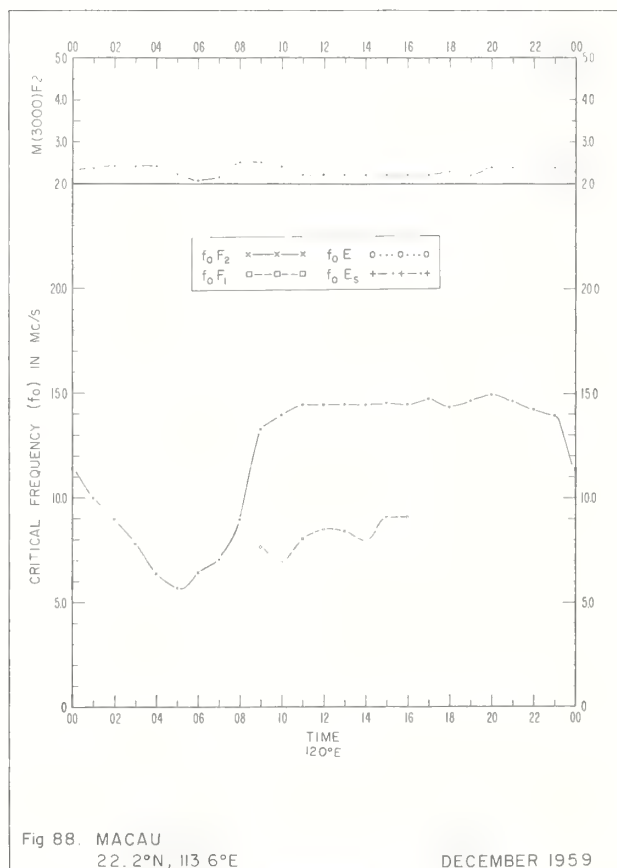
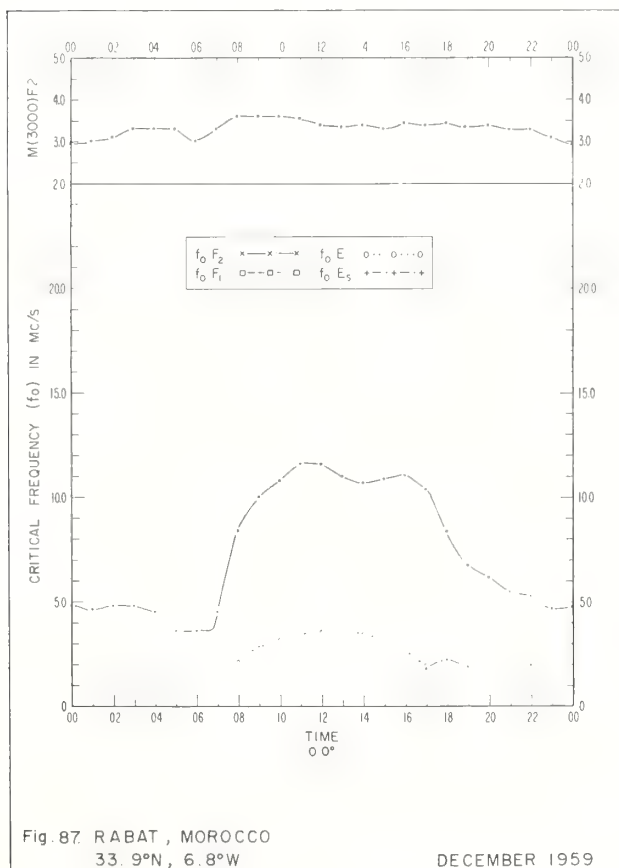
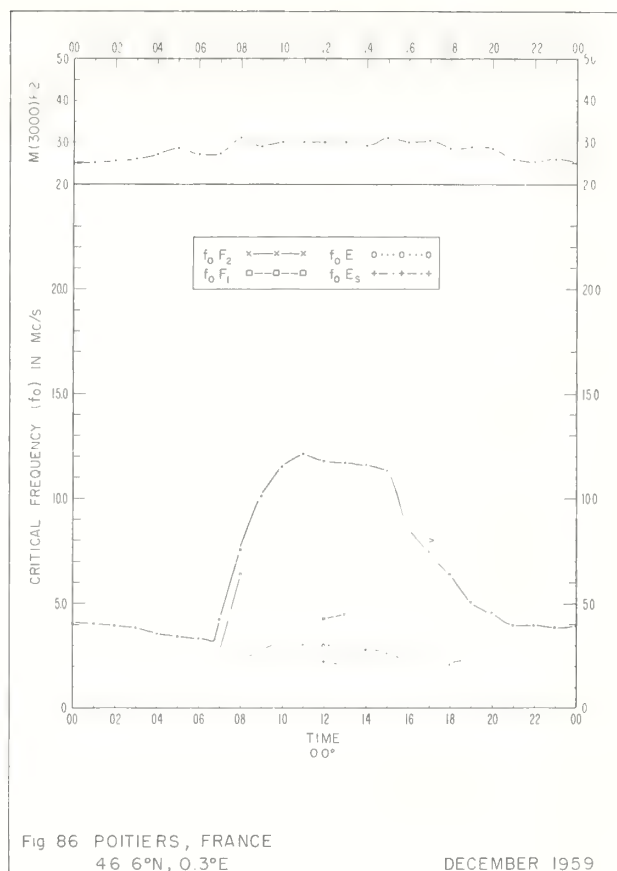
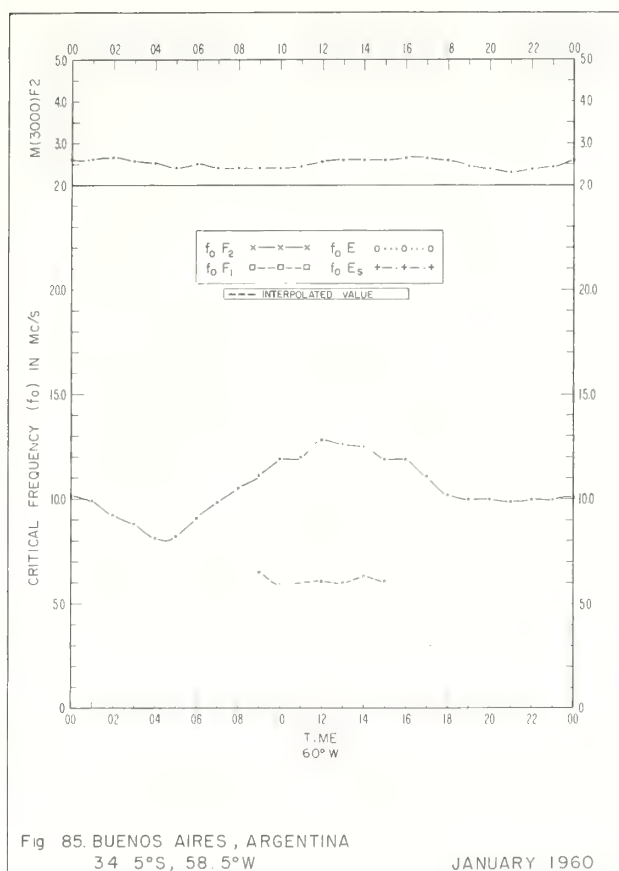
OCTOBER 1961

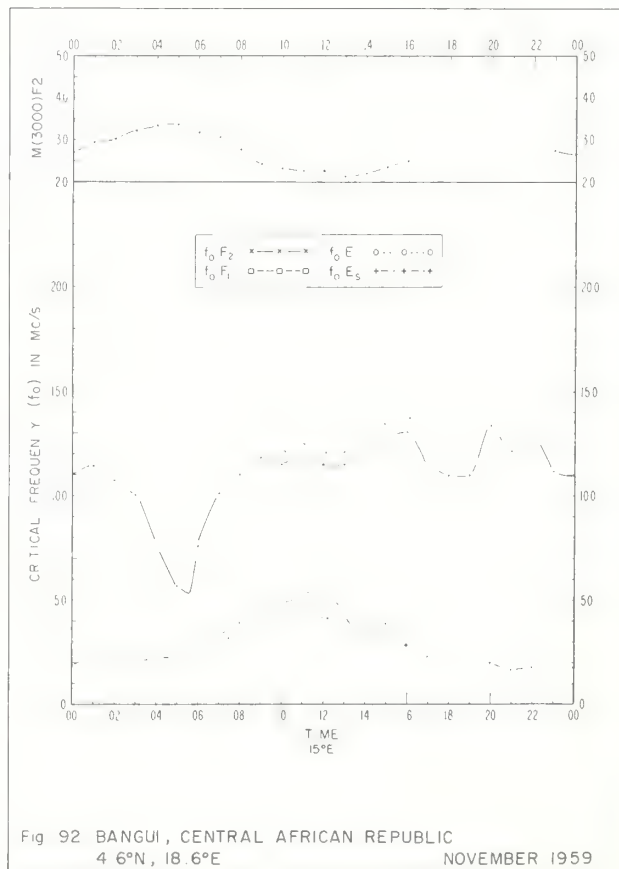
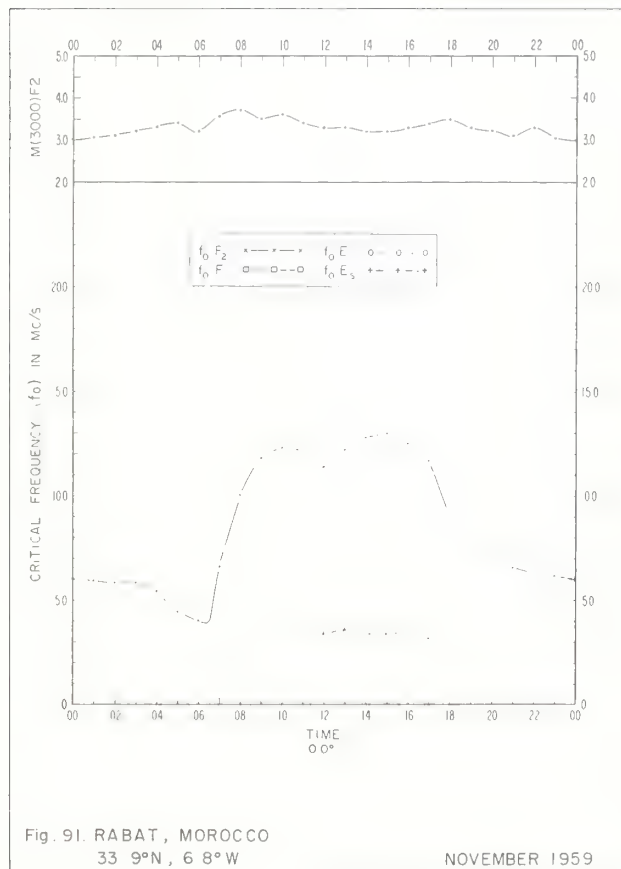
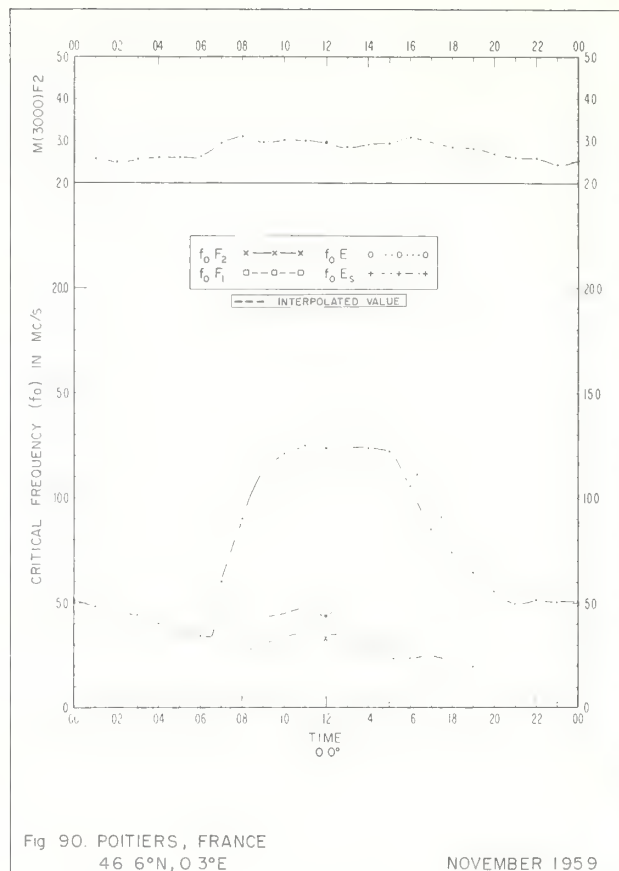
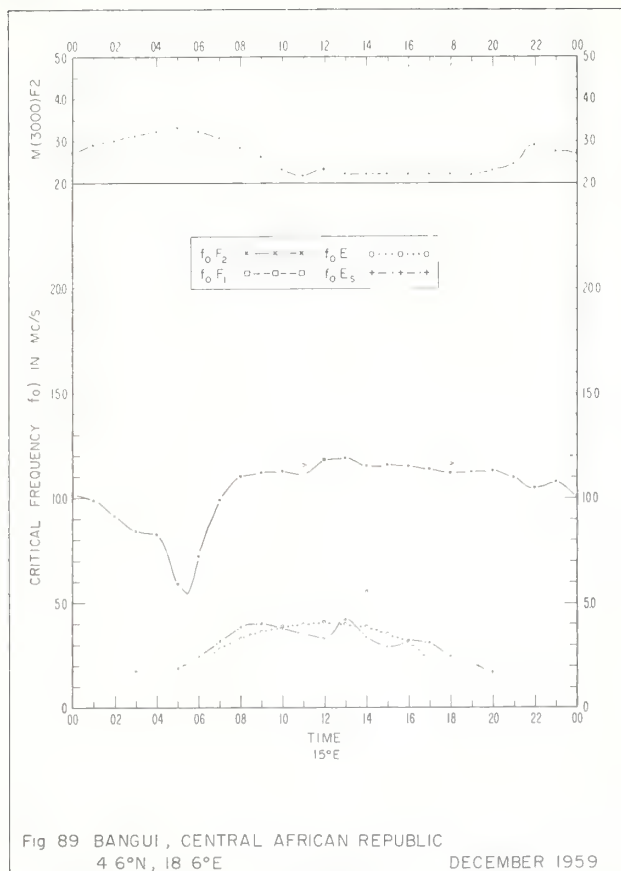


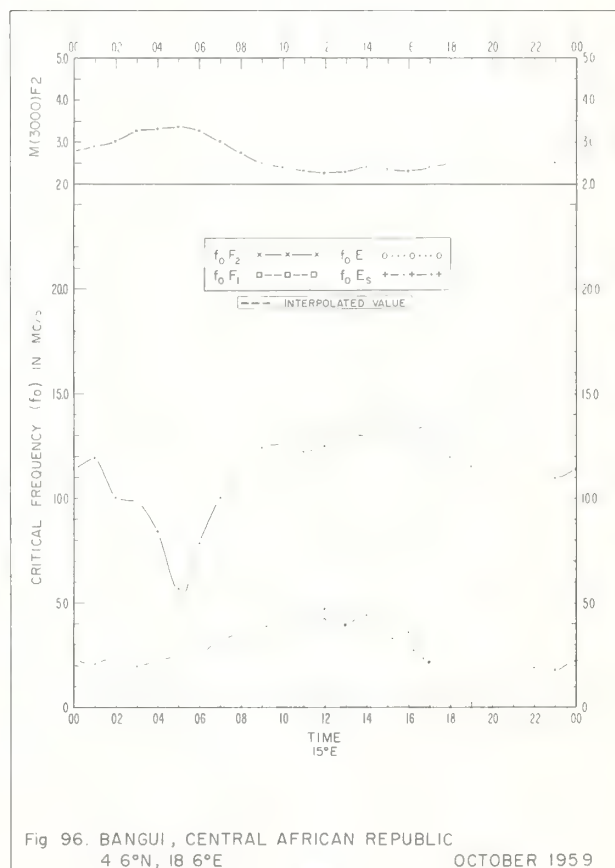
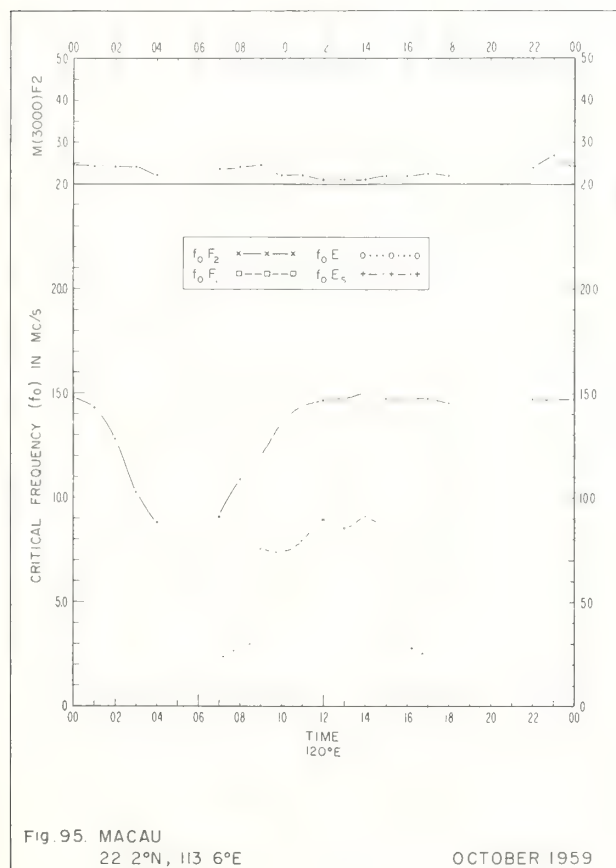
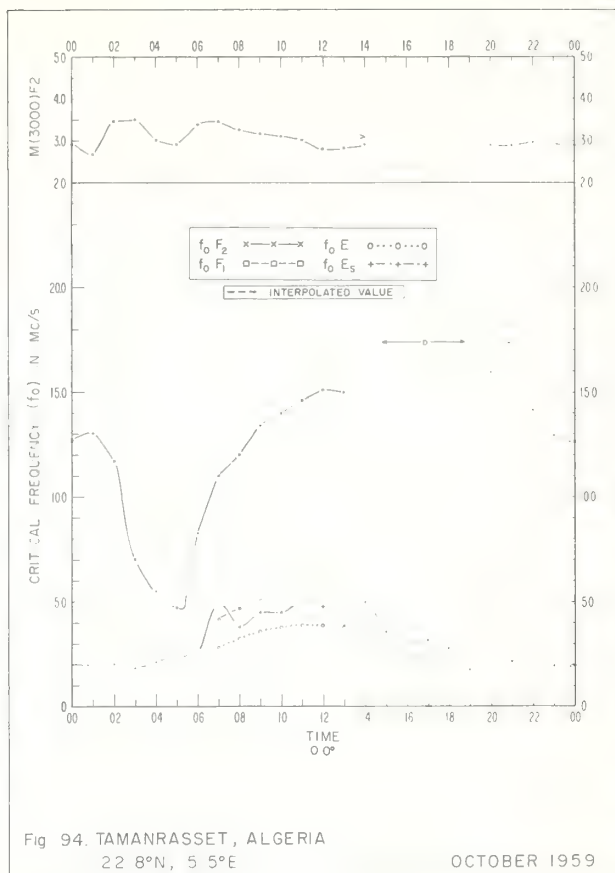
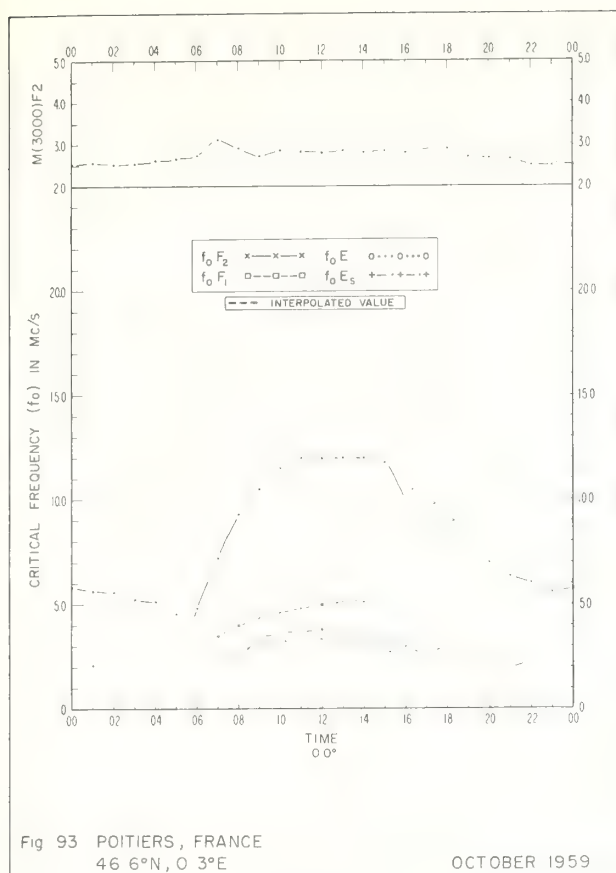












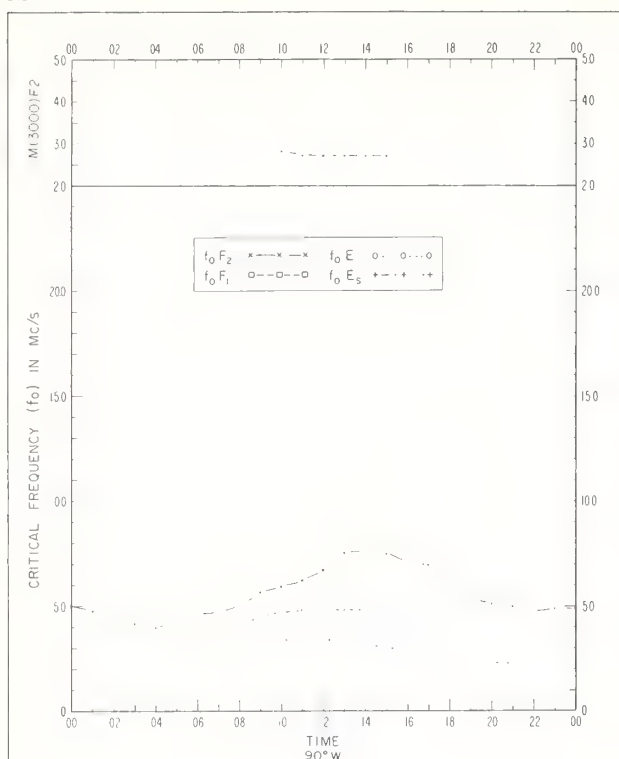


Fig 97. CHURCHILL, CANADA
58 8°N, 94 2°W

SEPTEMBER 1959

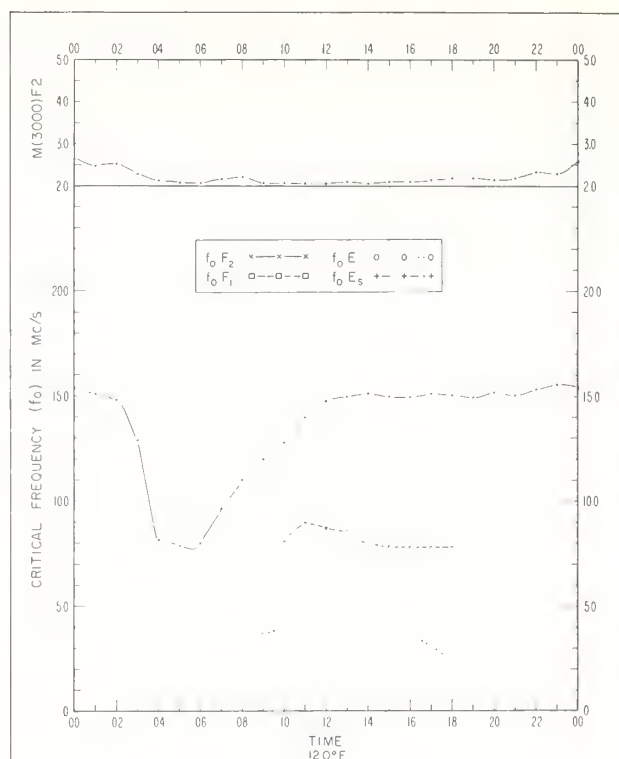


Fig 98. MACAU
22.2°N, 113 6°E

MAY 1959

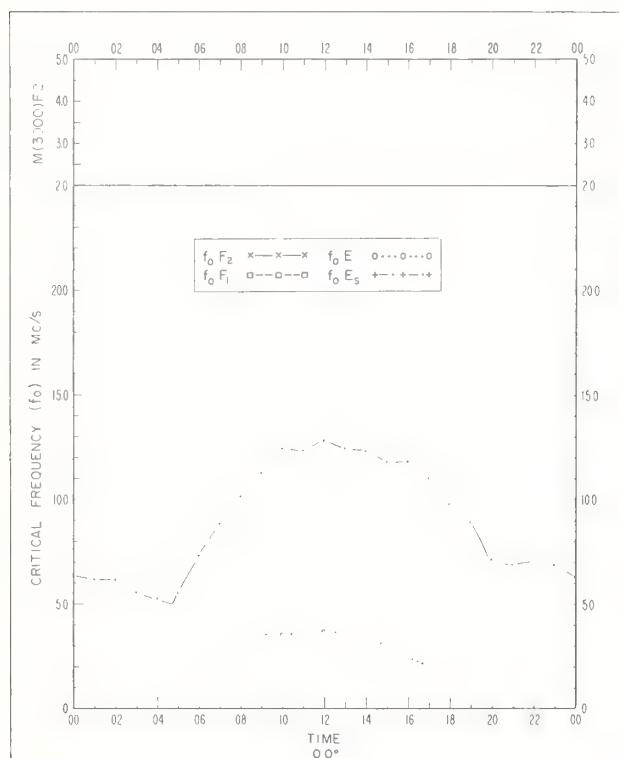


Fig.99. PRUHONICE, CZECHOSLOVAKIA
50 0°N, 14.6°E

MARCH 1959

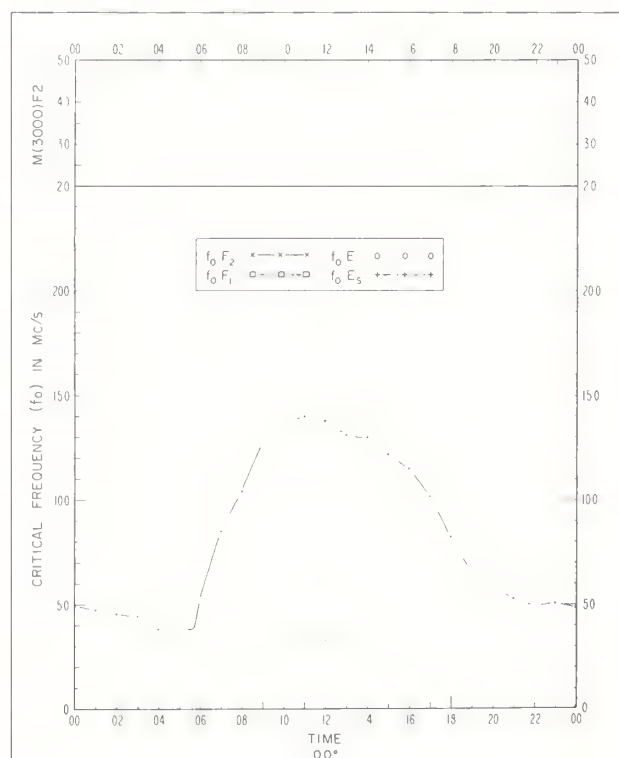


Fig 100. PRUHONICE, CZECHOSLOVAKIA
50.0°N, 14 6°E

FEBRUARY 1959

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